

15496  
C-1



**SITE SPECIFIC  
ENVIRONMENTAL BASELINE SURVEY**

**LEXINGTON-BLUEGRASS ARMY DEPOT  
LEXINGTON, KENTUCKY**

**March 1995**

**20070419569**

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SITE SPECIFIC  
ENVIRONMENTAL BASELINE SURVEY

FOR SELECT BUILDINGS AND  
PARKING AREA

LEXINGTON-BLUEGRASS ARMY DEPOT

LEXINGTON, KENTUCKY

MARCH 1995

## 1.0 INTRODUCTION

The Department of Defense (DoD) has established policy guidelines for an environmental review process to transfer, outgrant, or dispose of property by reaching a Finding of Suitability to Transfer (FOST). To support the FOST, an Environmental Baseline Survey (EBS) must be prepared for each deed transfer. An EBS for the Lexington Facility was conducted in the form of a Community Environmental Response Facilitation Act (CERFA) investigation which was finalized in April 1994.

The CERFA investigation included a review of existing investigative documents; U.S. Environmental Protection Agency (USEPA), State, and county regulatory records; environmental data bases; and title documents pertaining to the Depot. In addition, the Army conducted interviews and visual inspections of the Depot as well as visual inspections and data base searches for the surrounding properties.

This site specific Environmental Baseline Survey has been prepared to determine the environmental suitability of twenty two buildings and a parking lot at Lexington-Bluegrass Army Depot (LBAD), Lexington, Kentucky for property transfer. Specifically the transfer includes buildings 1, 3, 5, 6, 14, 15, 16, 17, 18, 22, 23, 101, 109, 113, 118, 150, 151, 152, 153, 220, 221, 228 and Parking Lot "C".

This site specific EBS included interviews, a records review, and a visual site inspection (VSI) of the twenty two buildings. No sampling was conducted as part of this survey. The purpose of the Site Specific EBS is to update the environmental condition of the proposed transfer parcels specifically identifying any environmental changes which may have occurred since the preparation of the CERFA report. As part of the visual walkthrough of the buildings, areas containing chipped or loose paint and damaged floor tiles or asbestos containing materials (ACM) were noted.

Based on results of the EBS and the Site Specific EBS, the buildings and parking lot are environmentally suitable for transfer to the Commonwealth of Kentucky for the proposed reuse.

### 1.1 Study Area Description

The proposed parcels to be transferred includes buildings 1, 3, 5, 6, 14, 15, 16, 17, 18, 22, 23, 101, 109, 113, 118, 150, 151, 152, 153, 220, 221, 228 and Parking Lot "C". This property is currently used to support the USSOCOM, RETROEUROPE, and other operations. A map showing the locations of the buildings and parking lot is provided at Appendix A and a general description of the buildings can be found in Table 1.

## 1.2 Proposed Reuse

Proposed reuse of the Depot is described in the Commonwealth of Kentucky's Reuse Plan which was finalized in March 1995. The plan specifies that the Depot will be utilized for similar uses such as administrative, small unit training, recreational, commercial, limited/existing residential (facility employees only), and light industrial.

## 1.3 BRAC Cleanup Plan (BCP) Area Classifications

The DoD BCP Guidebook specifies that each study area be classified into one of the following seven area types (DoD 1993):

- 1) Areas where no storage, release, and/or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
- 2) Areas where only storage of hazardous substances and/or petroleum products has occurred (but no release, disposal or migration from adjacent areas has occurred)
- 3) Areas where storage, release, disposal, and/or migration of hazardous or petroleum products has occurred, but in quantities that do not require a removal or remedial action
- 4) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken
- 5) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken
- 6) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented
- 7) Areas that are unevaluated or require additional evaluation

The 22 buildings and parking lot fall into categories 2 and 3. A complete inventory of all hazardous substances and petroleum products stored in the past or present can be found in Tables 3 and 4.

## 1.4 Study Methods

In addition to the reviews and inspections conducted during the Environmental Baseline Survey conducted in April 1994, as discussed in Section 1.0, this site specific EBS was conducted in accordance with applicable DOD guidance and consisted of the following:

a. Records Review: The record search consisted of a review of the environmental documents listed in Appendix F.

b. Interviews: As part of the VSI, interviews were conducted with; Mr. Todd Williams, BRAC Environmental Coordinator, Lexington-Bluegrass Army Depot, Mr. Snowden Isaack, Serv-Air, and Mr. Doug Marshall, Commonwealth of Kentucky Department of Military Affairs.

c. Visual Inspection: A site inspection was conducted on January 9 and 10, and March 8, 1995. Personnel participating in the walk through included Mr. Alan Freed (USAEC), Mr. Todd Williams (LBAD,BEC), Mr. Dale Burton, Mr. Tom Dugan, and Ms. Vickie Baker (Kentucky Department for Environmental Protection, KDEP), and Ms. Faith Fiene (Kentucky Department of Military Affairs).

d. Sampling: No sampling was conducted as part of the VSI. Numerous samples however, have been taken as part of the ongoing environmental investigation and are discussed in the documents referenced in Appendix F.

## 2.0 Findings

### 2.1 Underground Storage Tanks

The only UST of concern was formerly located adjacent to Building 1. This was a one thousand gallon heating oil tank which was removed in 1993. No other USTs were located near the remaining 21 buildings.

### 2.2 Aboveground Storage Tanks

A complete inventory of aboveground storage tanks associated with the 22 buildings can be found in Table 4.

### 2.3 Asbestos

A comprehensive asbestos survey was completed by the U.S. Army Environmental Center in May 1993. All buildings identified as having friable asbestos which posed a human health threat have been remediated through LBAD's ongoing removal program. A summary of the comprehensive asbestos survey can be found in Appendix D.

## 2.4 Lead-based Paint (LBP)

All buildings are assumed to contain lead-based paint since they were constructed prior to 1978. Areas containing loose or chipped paint are identified in Section 3.0 below. As specified in the DoD Policy on Lead-based Paint, no (LBP) abatement is required for buildings scheduled for non-residential use.

## 2.5 Polychlorinated Biphenyls (PCBs)

PCB management compliance programs at the Depot are conducted under AR 200-1 and the federal requirements found in 40 CFR 761, and Department of Transportation regulations. As part of this EBS, the only buildings found to contain PCBs were buildings 150 and 151 which contain concentrations that do not require a removal or remedial action. There are no known spills of PCB material associated with the remaining transfer parcels.

## 2.6 Radon

The radon reduction program has been conducted under AR 200-1, Chapter 11, U.S. Army Radon Reduction Program. A radon survey was conducted by installation personnel in 1991. The following buildings were found to contain radon levels above test detection limits. Warehouse 17D, Warehouse 17E, Warehouse 17F, Warehouse 14C, and Warehouse 14F. No remediation is required for the above warehouse buildings.

## 2.7 Radiological Survey

A preliminary radiological survey was conducted by the U.S. Army Environmental Center for Bay F in Building 14. This bay was used for storing radioactive sources and military instruments containing radioactive materials. Results of the survey indicated that no radioactive contamination above action limits was detected. A final radiation survey was completed by the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) which included Buildings: 3, 5, 6, 14, 15, 149, 150, 151, 152, 153, 220, and 221. The survey data indicates that there is no radiological contamination detected above the natural background radiation levels and that these buildings can be released for unrestricted use to the public. Subject memorandum is included in Appendix E.

## 3.0 Building Walk-through (January 9-10, March 8, 1995)

All of the buildings proposed for transfer were investigated. The following buildings contained areas of disrepair or potential environmental concern which are noted below:

Building 1    Basement floor; boiler room contains chipped paint,  
                 first office on left, N. side, chipped paint,  
                 First floor; contains a few broken floor tiles,  
                 Third floor; loose paint on lobby ceiling

- Building 5 Old Photo Lab; loose, chipped floor tiles
- Building 6 A-Bay; loose and damaged floor tiles and peeling paint in office area, peeling paint on girders on south side  
B-Bay; chipped floor tile in office area  
D-Bay; mastik material left in place on floor in two offices on south end, piping along east wall of D-Bay next to offices has peeling green paint, paint peeling on floor in SE corner  
F-Bay; four S.W. end offices contain damaged floor tile, peeling paint on outside walls of offices third and fourth from W. end, paint on metal girders is flaking and paint on walls peeling outside of offices
- Building 14 B-Bay; peeling paint on wall and ceiling in restroom  
E-Bay; peeling paint on wall in office
- Building 15 B-Bay; peeling paint on walls and ceiling in restroom
- Building 17 DRMO office area in E-Bay, asbestos floor tile damaged
- Building 18 loose paint men's restroom wall
- Building 101 loose floor tiles, chipped paint in office
- Building 228 chipped paint on door, chipped paint on ceiling and walls in office, loose insulation in restrooms

#### 4.0 Hazardous Materials/Petroleum Products Storage

A number of hazardous substances or petroleum products have been stored in the referenced buildings as part of the activity in those areas. Refer to Table 3 for a current chemical room inventory in Building 3. Table 4 is a summary of materials stored in various buildings as noted from the April 1994 CERFA investigation. There are no known spills or releases associated with these buildings except as noted in Section 2.5 with buildings 150 and 151. The Army has performed all known remedial actions necessary to protect human health and the environment for the buildings of concern. Any remedial actions deemed necessary after the date of property transfer, and for which the Army is deemed responsible, will be conducted by the Army.

#### 5.0 Recommendations as to the Suitability to Transfer

After inspection of the proposed transfer parcel, review of the documentation, and review of the proposed reuse, the twenty two buildings and parking lot are found to be environmentally suitable for transfer. This recommendation is based on the determination that no further remedial action is necessary and no threat to human health or the environment has been identified.

TABLE 1. Proposed Parcels to be Transferred

Buildings	Description
1	Administration General Purpose
3	Electrical Maintenance Shop and Administrative General Purpose
5	General Purpose Warehouse, Cold Storage Warehouse, and Operations General Purpose
6	General Purpose Warehouse
14	Operations General Purpose
15	Warehouse, Operations General Purpose
16	Warehouse
17	Warehouse
18	Administrative General Purpose
22	Operations General Purpose
23	Vehicle Storage
101	General Purpose Warehouse
109	Facility Engineering Storehouse
113	Flammable Material Storehouse
118	General Purpose Warehouse
150	Salvage and Surplus Property
151	Salvage and Surplus Property
152	Salvage and Surplus Property
153	Salvage and Surplus Property
220	General Purpose Warehouse
221	General Purpose Warehouse, Electrical Maintenance Shop, Supply Maintenance Warehouse
228	General Purpose Warehouse
Parking Lot C	Open material and vehicle storage (transfer will include hardstand only, no soil)



TABLE 2. DoD Environmental Condition Categories

Category	Definition	Buildings
1	Areas where no storage, release, and/or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).	
2	Areas where only storage of hazardous substances and/or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred).	Remainder of 22 buildings parking lot "C"
3	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action.	18, 150, 151
4	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken.	
5	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken.	
6	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented.	
7	Areas that are unevaluated or require additional evaluation.	

## CHEMICAL ROOM

## INVENTORY

AS OF 12 JANUARY 1995

Part #/Stock #	QTY	UOM	Location	Comments				
1 8010 E-0055	16	GAL	P11A-B6		Sherman Williams	A		
2 8010 E-0017	16	GAL				B		
3 1177A/B5GAL	13	4 GAL	P11A1-B2	Paint	Sherman Williams	A		
	13	GAL		Epoxy		B		
4 8010-00-082-2450	3	5 GAL	P11A4	Epoxy	BF Goodrich	A		
	3	5 GAL		Epoxy		B		
5 8010-01-229-7547	33	GAL	P11B1-2		Pratt & Lambert	A		
	33	GAL				B		
6 8010 E-0189	5 GAL	EA	P11B3		Hentzen			
7 8010 E-0188	2	KT	P11B4					
	7	GAL	P11B5	Poly Paint	Dupont	A		
8 8030 E-0023	1	PT		Activator		B		
	45	GAL	P11C3-6		U.S. Chemical		2.75oz tube (40ea) 5 in a box	
9 ES-1341	4	5 GAL	P12B5	5C-150 Solvent	Technical		in a box (200 ea)	Part B
10 ES-642	22	GAL	P12C1-3		Savogran			
11 ES-1329	6.5	oz can	P12C4	Spray Gun	Crown			
12 ES-385	4	GAL	P12C5	Type UR	Conap			
13 ES-362	10	5 GAL	P12D1-D6	Paint Booth Spray	Chemco			
14 ES-104	7	QT	P12E3	Varnish	NAZ-DAR			
15 8010 E-0013	4	EA	P21A1					
16 8010-01-015-6498	8	GAL	P21A3	Type I Paint	Courtaulds Acrospace	A		
	8	GAL		Type I Activator		B		
17 8010 E-0126	1	gal	P21B1	Hysol spray thinner				
18 8010 E-0012	1	gal	P21B2	Type II hardner	Sherman Williams	B		
19 8010 E-0034	2	GAL	P21B3	NON SKID Coating	ITW			
	2	QT		NON SKID Hardener				
20 8010 E-0115	16	GAL	P21B4-C4	Type I Epoxy	Pratt & Lambert	A		
	16	GAL		Type I Activator		B		
21 8010-01-146-2646	13	gal	P21C1	polyester coating		A		
	13	qt		type II catalyst coating		B		
22 8010-01-229-7544	7	GAL	P21C2	Paint Type II	Hentzen			

CHEMICAL ROOM  
INVENTORY  
AS OF 12 JANUARY 1995

23	724-226/724-114	3	GAL	P21C3	Type II Class I	Pratt & Lambert			
		3	GAL		Type II Class 1				
24	8010 E-0182	2	GAL	P21C5	Type II Class I epox	Pratt & Lambert	A		
		2	GAL		Type II Class I Activator		B		
25	8010-00-482-5670	4	gal	P21D1	Type I enamel	Courtaulds Aerospace	A		
		4	gal		Type I enamel		B		
26	8010-01-276-3639	20	GAL	P21D2	Paint Type II	Hentzen			
27	8010-01-235-8059	1	GAL	P21D3	Type II coating	Delt	A		
		1	QT		Type II catalyst		B		
28	8010-01-229-7542	15	GAL	P21D5-E5	Type II Paint	Hentzen			
29	8010 E-0152	8	gal	P21E1	Type II	Niles Chemical Paint	A		
		8	gal		Type II		B		
30	8010 E-0139	2	gal	P21F1	Aircraft Paint	Niles Chemical	A		
		2	qt		Activator		B		
31	8010 E-0027	15	gal	P21F3	Reducer Type II	Sherman Williams			
32	8010 E-0021	1	GAL	P22B1	Enamel Type II	Sherman Williams	A		
		1	GAL		Type II Hardner		B		
33	8010 E-0040	10	GAL	P22B2	Thinner	Sherman Williams			
34	8010-01-224-7545	17	GAL	P22B3	Specialty Coating	Dexter Corp			
35	8010 E-0022	22	EA	P22C-D2					
36	8010-01-131-6255	2	GAL	P22C3	Paint Type II	Pratt & Lambert	A		
		2	QT		Catalyst Type II		B		
37	8010-01-146-2649	12	GAL	P22C4	Aircraft Paint	Delt	A		
		12	QT		Catalyst		B		
38	8010 E-0023	25	GAL	P22D3	Thinner Catalyst reducer				
39	8010 E-0007	19	GAL	P22D4	Type II Paint	Niles Chemical			
40	8010 E-0043	4	GAL	P22E3	Primer	Master Chem Ind			
41	8010-00-297-0546	6	GAL	P23B1	Plain Black	Randolph			
42	8010-00-297-0593	6	11 oz	P23U2	Zinc Chromate prim	Plastic-Kote Co.			
43	8010-01-314-6069	7	GAL	P23C1	Paint	Tempo	A		
		7	GAL		Catalyst Type II		B		
44	020X422	5	GAL	P23D1	Solvent Reducer	Courtaulds Aerospace			
45	8010-00-835-2114	18	11 oz	P23D3	Zinc Primer Spray	Tempo			

CHEMICAL ROOM  
INVENTORY  
AS OF 12 JANUARY 1995

46	8010 E-0149	4	GAL	P23D4	Primer Sealer	ACME			
47	8010-00-527-2884	14	GAL	P23E1	Black Paint	Randolph			
48	8010 E-0150	7	GAL	P23F1	Enamel Reducer	Acme			
49	8010 E-0179	19	5 GAL	P23FL	Lacquer, acrylic	Lenmar	A		
50	8010-01-042-9438	4	GL	P24C1					
51	8010 E-0021	3	GAL	P24C3	TILE CLAD II Harde	Sherman Williams	A		
52		3	GAL	P24C3	Tile II		B		
53	8010-01-350-5239	12	EA	P24C4	Silicone Enamel	Niles			
54	8010-01-131-6255	12	GAL	P24C5	Amber Liquid	DEET	A		
		12	QT		Type II Aircraft		B		
	8010-01-131-6255	7	GAL		Lacquer camouflage	Pratt & Lambert	A		
		7	QT		Coating Polyurethane		B		
55	8030 E-0004	3	GAL	P24D1	Epichlorohydrin	Advanced Tech	A		
			1/2 QT		Triethylene Tetramine		B		
56	6810-00-753-4993	6	8 oz	P24D2	adhesive	Carboline			
57	8040 E-0076	4	QT	P24D5	Adhesive	Carboline			
58	8040-00-059-2399	1	QT	P24E2					
59	8010 E-0138	2	PT	P24E5	Spot Remover	Acme			
60	8010 E-0154	9	GAL	P24F2	Enamel Thinner	Acme			
61	ES-361	2	55 GAL	PRFL	Alcohol	Technical			
62	ES-694	4	55 gal	PRFL	Type II Thinner	Technical			
63	ES-696	2	55 gal	PRFL	Type I Thinner	Technical			
64	ES-697	1	55 gal	PRFL	Lacquer thinner	Technical			
65	8115 E-0004	110	GL	PRFL					
66	9150 E-0017	2	5 GAL	PRFL	Leaking-Safety verif	P.O. # 922072-001			

TABLE 4. Notice of hazardous material/petroleum storage  
As of April 1994, Lexington-Bluegrass Army Depot

Buildings	Notice of Material Storage
Building 1	Fuel oil stored in 1000 gal UST, removed
Building 3	Hazardous waste stored in 55 gal container (C-Bay), paint stored in 55 gal container (E-Bay), chromium containing liquid stored in 275 gal AGT (C-Bay), hazardous waste stored in container (satellite accumulation area), paint and solvents stored in 1350 gal container (E and F Bay), paint and solvents stored in 600 gal container (B-Bay), solvent stored in 20 gal container (E-Bay solvent wash station)
Building 5	Lithium stored in container
Building 14	Fuel oil stored in 275 gal AGT
Building 15	Fuel oil stored in 275 gal AGT (four tanks)
Building 16	Propane stored in four 500 gal AGTs, fuel oil stored in 275 gal AGT, hazardous materials stored in container
Building 17	Propane stored in 500 gal AGT, fuel oil stored in 275 gal AGT, hazardous material stored in container (hazardous materials storage)
Building 18	Ammonia gas stored in AGT
Building 23	Fuel oil stored in 275 gal AGT
Building 101	Lithium batteries stored in container
Building 113	Fuel oil stored in 275 gal AGT, flammables stored in 30 gal container
Building 151	Propane stored in 500 and 1000 gal AGT
Building 152	Propane stored in 500 gal AGT
Building 221	Paint and solvents stored in 250 gal container hazardous waste stored in 55 gal container, foam chemicals stored in 240 gal AGT (4 tanks)
Building 228	Fuel oil stored in 275 gal AGT
Buildings, 6, 22, 109, 118, 150, 153, 220, Parking lot C	General warehouse storage of materials, no documented hazardous materials Parking Lot C; open storage non hazardous materials

## ENVIRONMENTAL RESTRICTIONS

1. The Transferee or successors or assigns shall comply with all applicable Federal, state, and local laws, regulations, and standards that are or may become applicable to transferee's activities on the transferred premises.

2. The Transferree or successors or assigns shall be solely responsible for obtaining at its cost and expense any environmental permits required for its operations under the transfer.

3. The Army shall have access to the property in any case in which a response action or corrective action is found to be necessary after date of property transfer, or such access is necessary to carry out a response action or corrective action on adjoining property.

4. Environmental investigations and remedial and oversight activities will not be disrupted at any time. Such conditions will include, but are not limited to:

a. Provide for continued access for DoD and regulatory agencies to monitor the effectiveness of cleanup, perform five-year reviews, and/or take additional remedial or removal actions.

b. Ensure that the proposed use will not include activities that could cause a condition of further pollution or pose a new threat to the public health or environment or disrupt any remedial activities, past, present or future, such as the following:

(1) Surface application of water that could impact the migration of contaminated ground water;

(2) No construction that would interfere with, negatively impact, or restrict access for cleanup work.

**APPENDIX A**

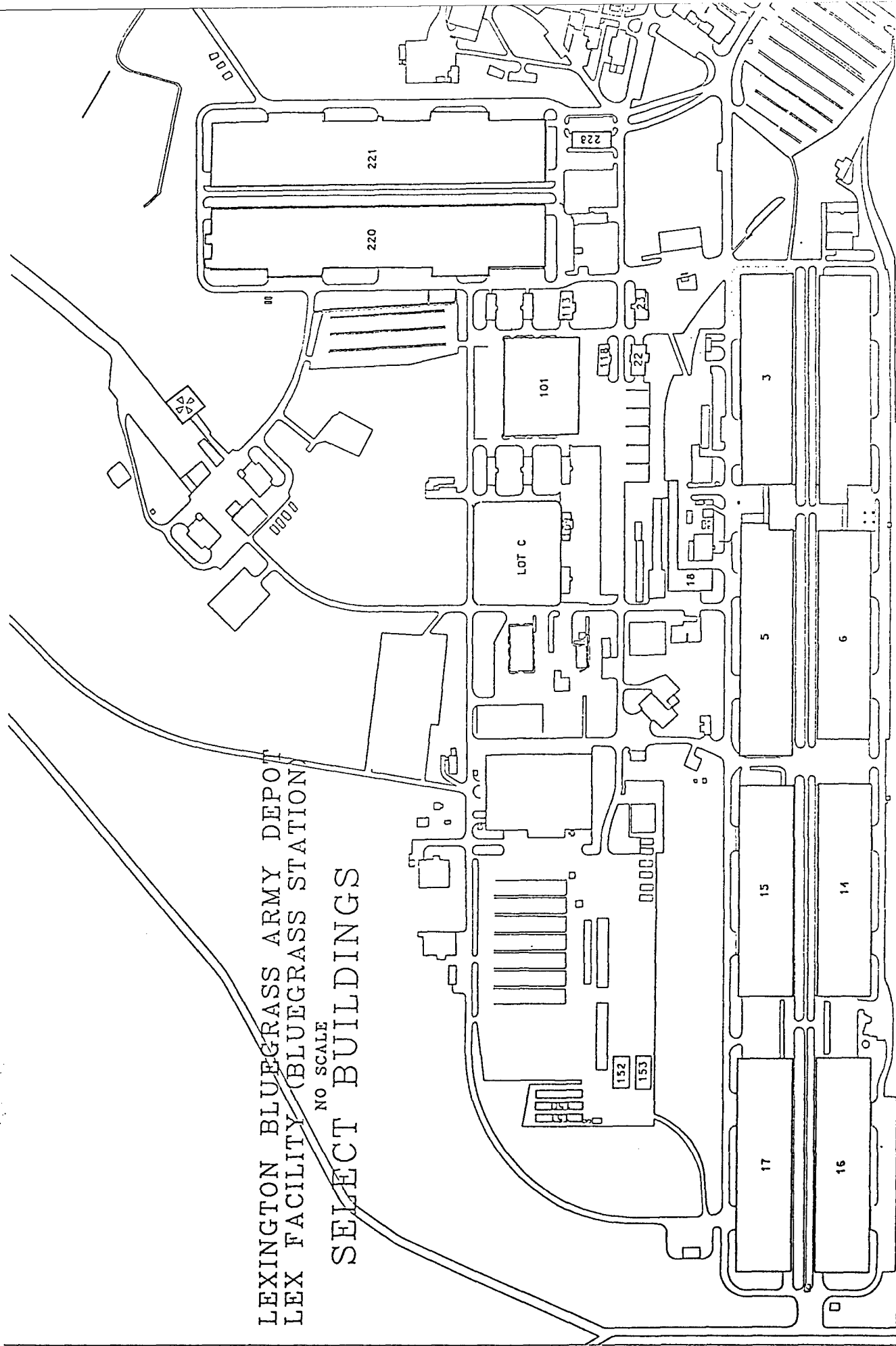
**MAP OF TRANSFER PARCELS**

**LEXINGTON FACILITY**

LEXINGTON BLUEGRASS ARMY DEPOT  
LEX FACILITY (BLUEGRASS STATION)

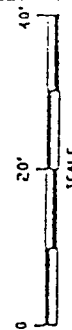
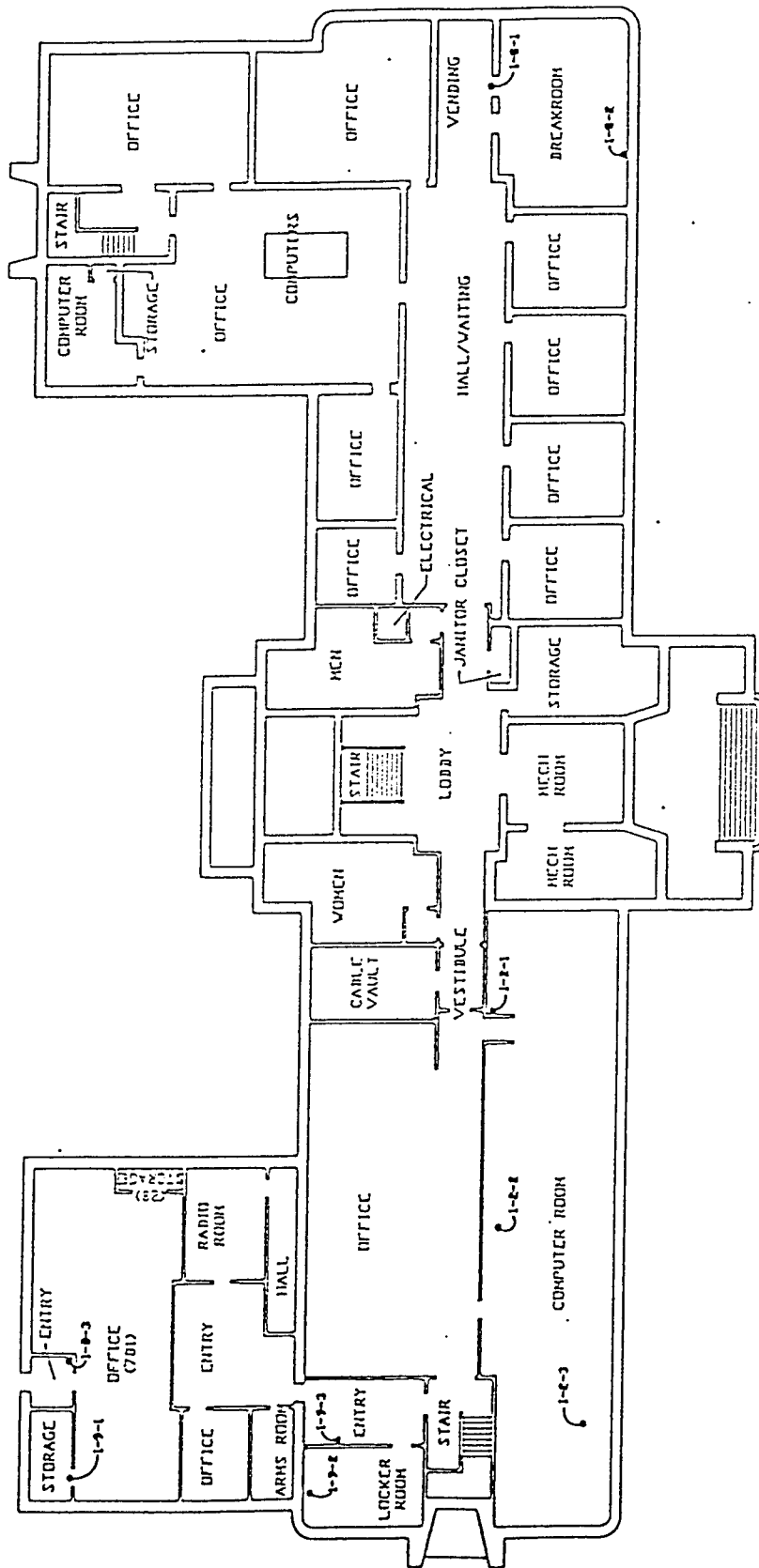
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SELECT BUILDINGS





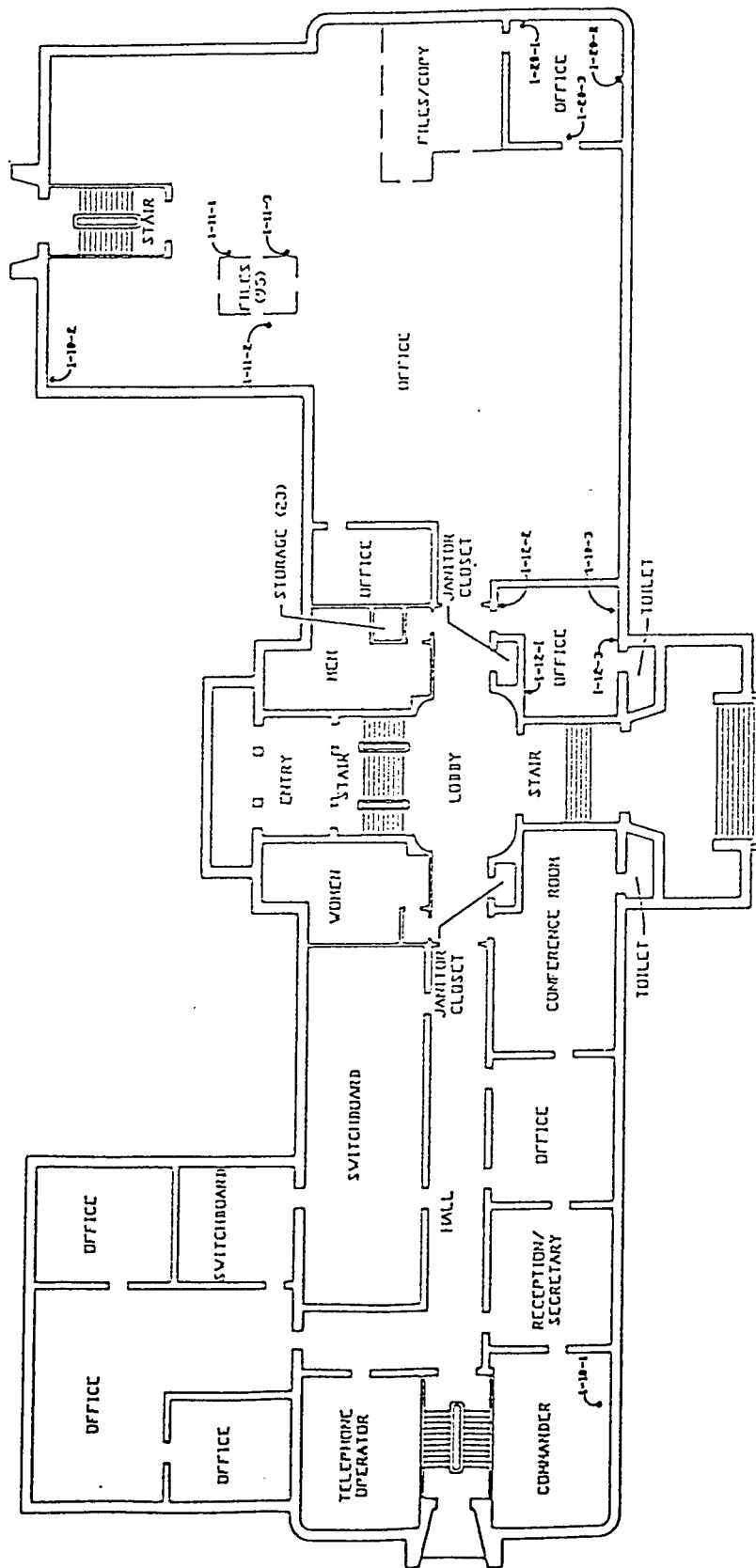
**APPENDIX B**  
**BUILDING FLOOR PLANS**  
**AND**  
**PARKING LOT DIAGRAM**



LEGEND	
XXX-XX-X	SAMPLE NO. & LOCATION



LAWTON & ASSOC.		6330 PROPRIETORS RD.	
(614) 436-8400		WORTHINGTON, OH 43081	
DATE 0-20-92	CUSTOMER USAEC	MAKER BY BSK	APPROVED BY
SUBJECT HOCHLAG - ADMINISTRATIVE BUILDING			
PROJECT BASEMENT FLOOR PLAN			
PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT			
LEXINGTON, KY		BLD1-B-1	



0 20' SCALE

LEGEND	
XXX-XX-X	SAMPLE NO. & LOCATION



LAWSON & ASSOC.

(614) 436-8400

6330 PROPRIETORS RD  
WORTHINGTON, OH 4308

OWNER, USAEC

DATE 10-20-92

PROJECT BUILDING #1 - ADMINISTRATIVE BUILDING

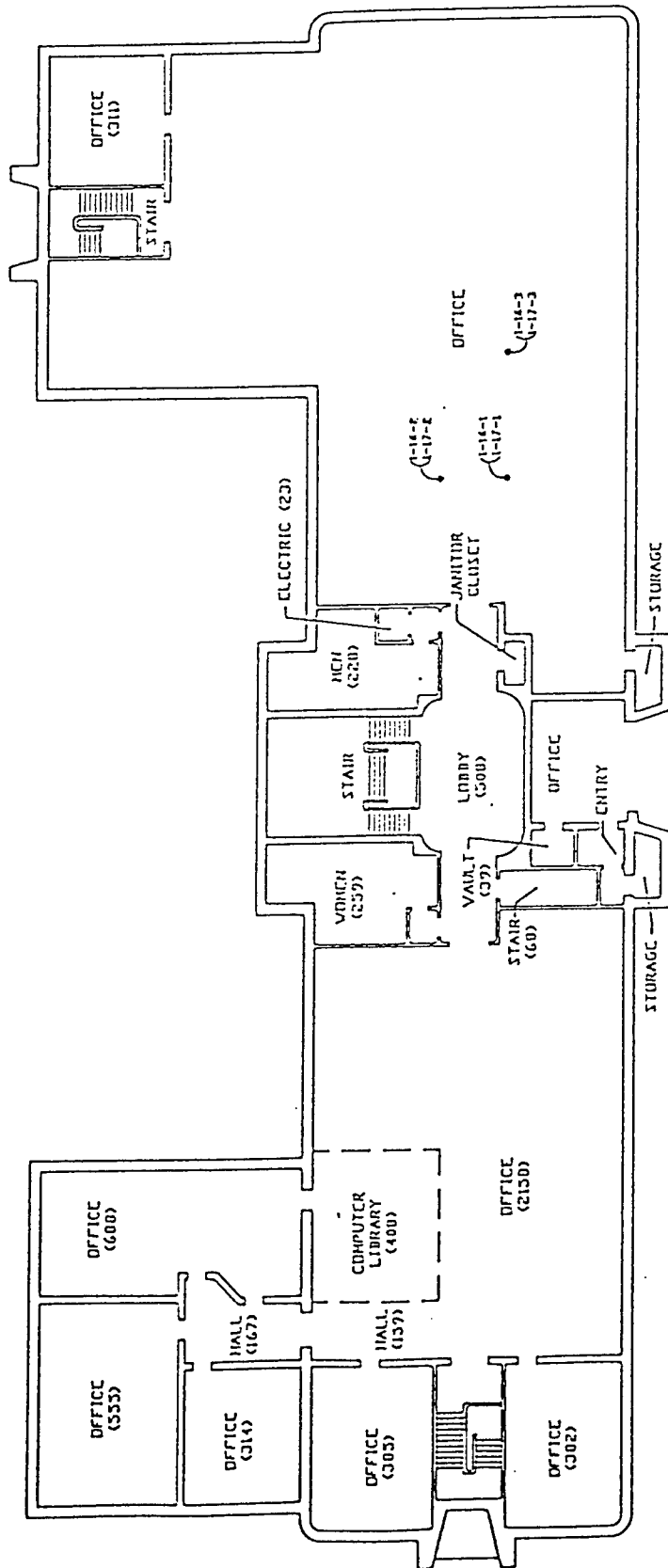
FIRST FLOOR PLAN

FILE-ASBESTOS-CONTAINING MATERIAL LOCATION

PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT

LEXINGTON, KY

BLD1-1-S



0 20' SCALE

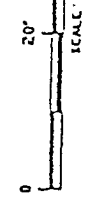
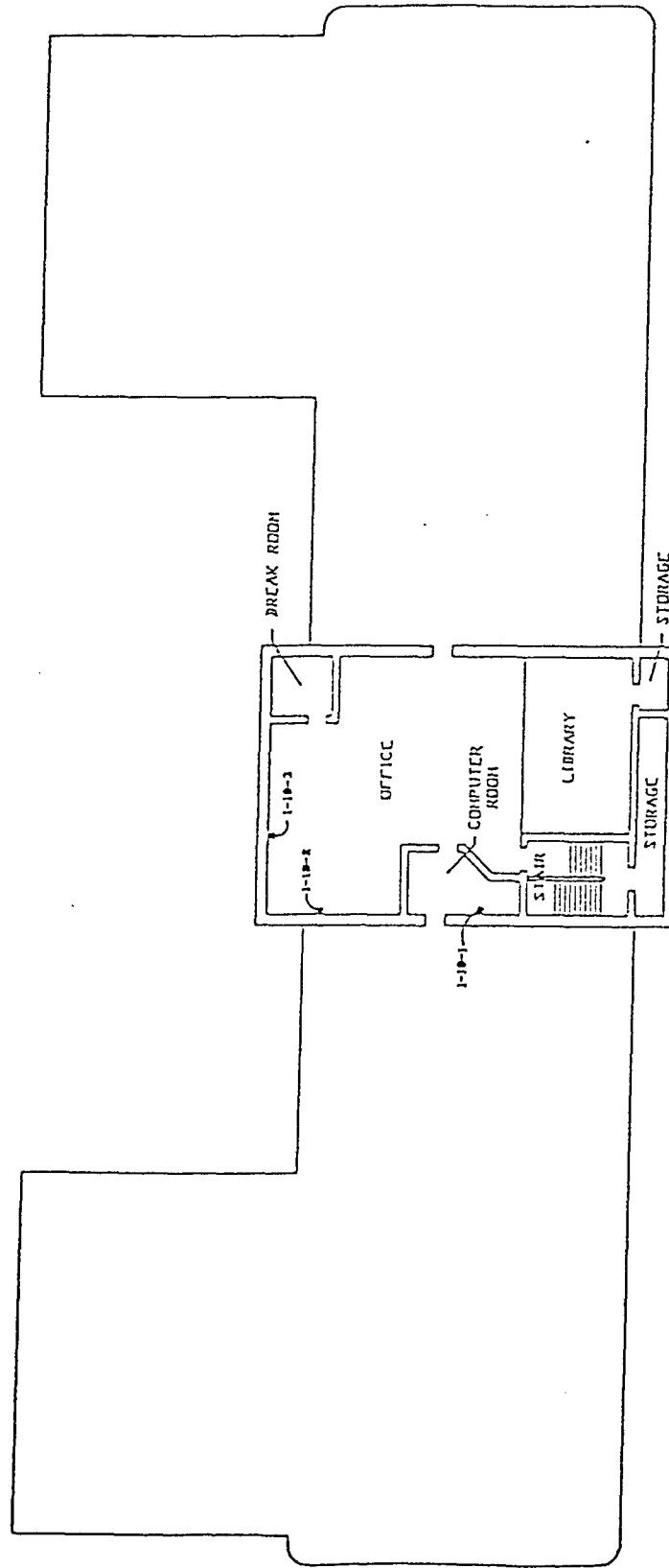
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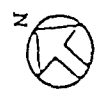
LAWSON & ASSOC.  
(614) 436-0400

6330 PROPRIETORS  
WORTHINGTON, OH 4300

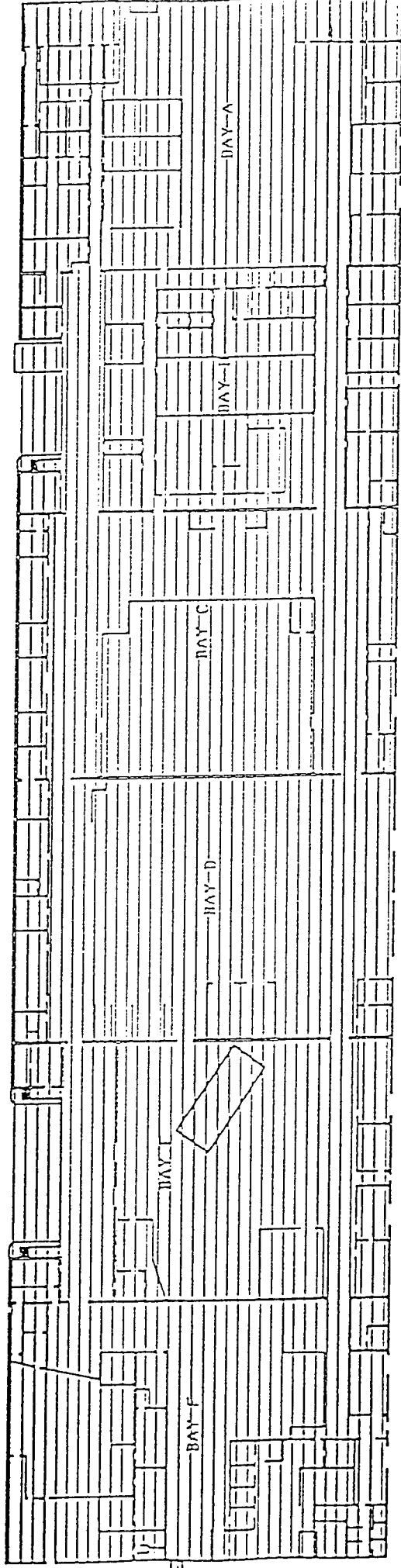
DATE: 11-20-92	CUSTOMER: USACE	DESIGNER: JLC
DRAWN BY: SC	PROJECT: 3RD FLOOR PLAN	REVISION NO.
PROJECT: LEXINGTON - BLUE GRASS ARMY DEPOT	LOCATION: LEXINGTON, KY	BLD1-2-



LEGEND	
XXX-XX-X	SAMPLE NO. & LOCATION



LAWTON & ASSOC. (614) 436-0400		6330 PROPRIETORS WORTHINGTON, OH 43085	
DATE 0-20-92	CUSTOMER USAC	DRAWN BY DSK	APPROVED BY
BUILDING - ADMINISTRATIVE BUILDING			
FLOOR THIRD FLOOR PLAN			
PROJECT NON-ASBESTOS-CONTAINING MATERIAL SAMPLING LOCATION			
LEXINGTON - BLUE GRASS ARMY DEPOT		DRAWN BY	
LEXINGTON, KY		BLDI-3-	



\* = Corridor & part of Building 3  
 Extends to Building 5

LEGEND

AREAS WITH SUSPECT  
 ASBESTOS-CONTAINING MATERIAL

0 50' 100'

SCALE

LAWSON & ASSOC. 6330 PROPRIETORS RD  
 (614) 436-0400 WORTHINGTON, OH 4308

CUSTOMER: USAEC

DATE: 9-11-92

PROJECT: BUILDING 3 - GROUNDWATER SYSTEMS  
 FULL FLOOR PLAN  
 AREAS WITH SUSPECT ASBESTOS-CONTAINING MATERIAL

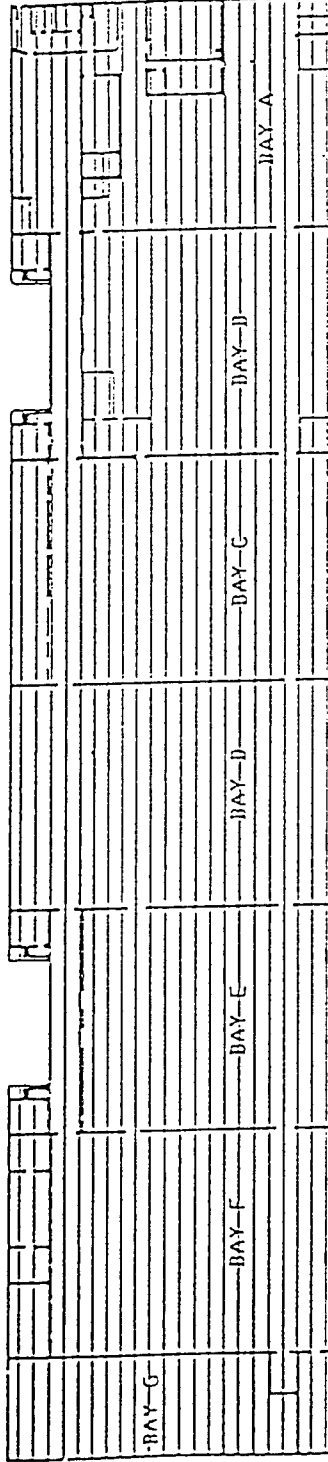
DRAWN BY: BSK

APPROVED BY:

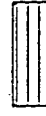
PROJECT: LEXINGTON - BLUE GRASS ARMY DEPOT  
 LEXINGTON, KY

BLD3-X





LEGEND



AREAS WITH SUSPECT ASBESTOS MATERIAL

LAWTON & ASSOC.

6330 PROPRIETORS RD  
(614) 436-8400 WORTHINGTON, OH 43083

DATE 9-16-92

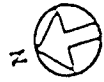
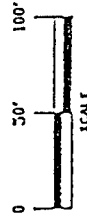
DRAWN BY BSK  
APPROVED BY

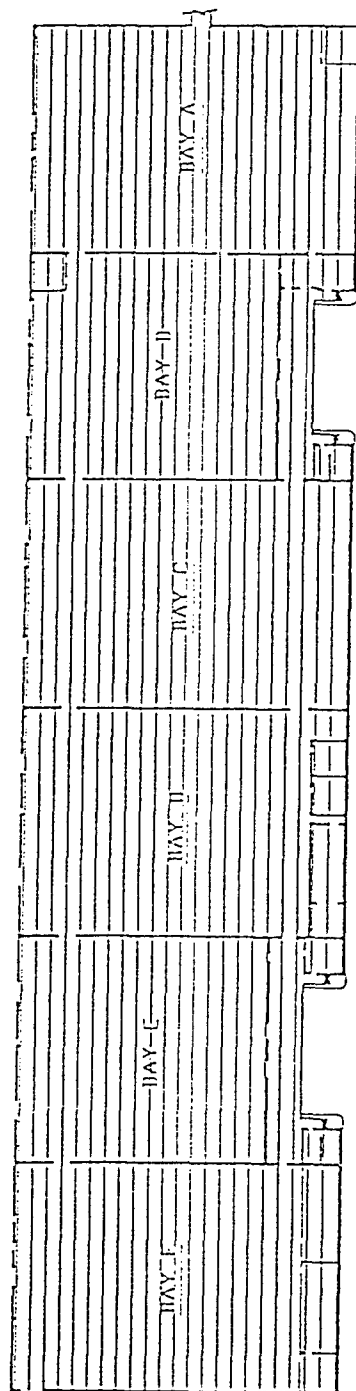
USAEC


PROJECT BUILDING #3 - HALLROAD/A-V SUPPLY  
FULL FLOOR PLAN

PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT  
LEXINGTON, KY

DRAWING NO.  
BLD5-X





LEGEND	
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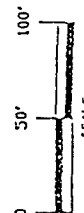
LAWTON & ASSOC.

6330 PROPRIETORS RD.  
WORTHINGTON, OH 43085

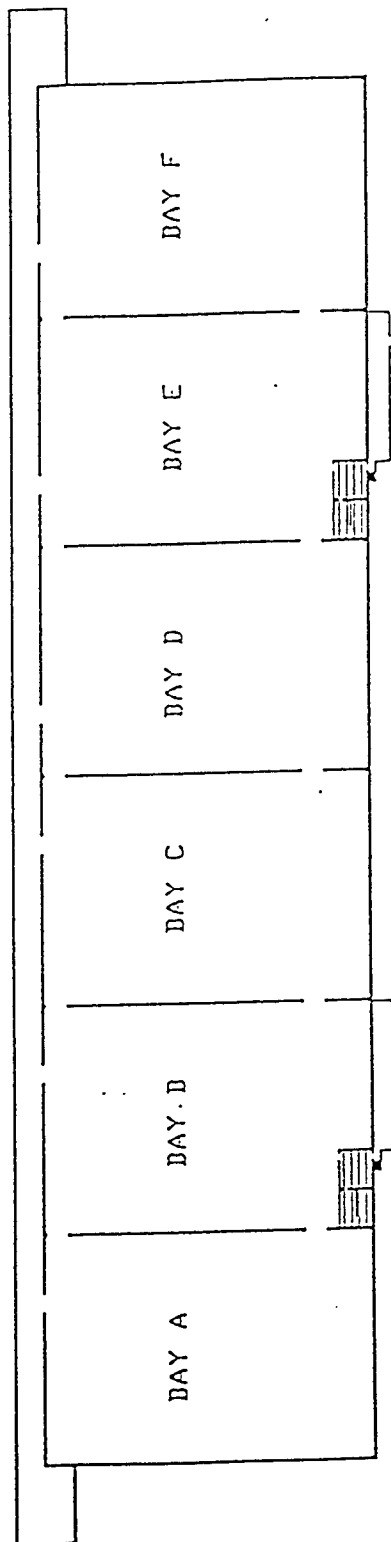
(614) 436-8400

DATE 9-22-92	CUSTOMER USAEC	MAKER BY BSK
SUBJECT BUILDING #6 - GENERAL SUPPLY		APPROVED BY
FULL FLOOR PLAN		
AREAS WITH SUSPECT ASBESTOS-CONTAINING MATERIALS		
PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT		
LEXINGTON, KY		

BLD6-X

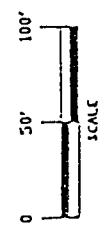




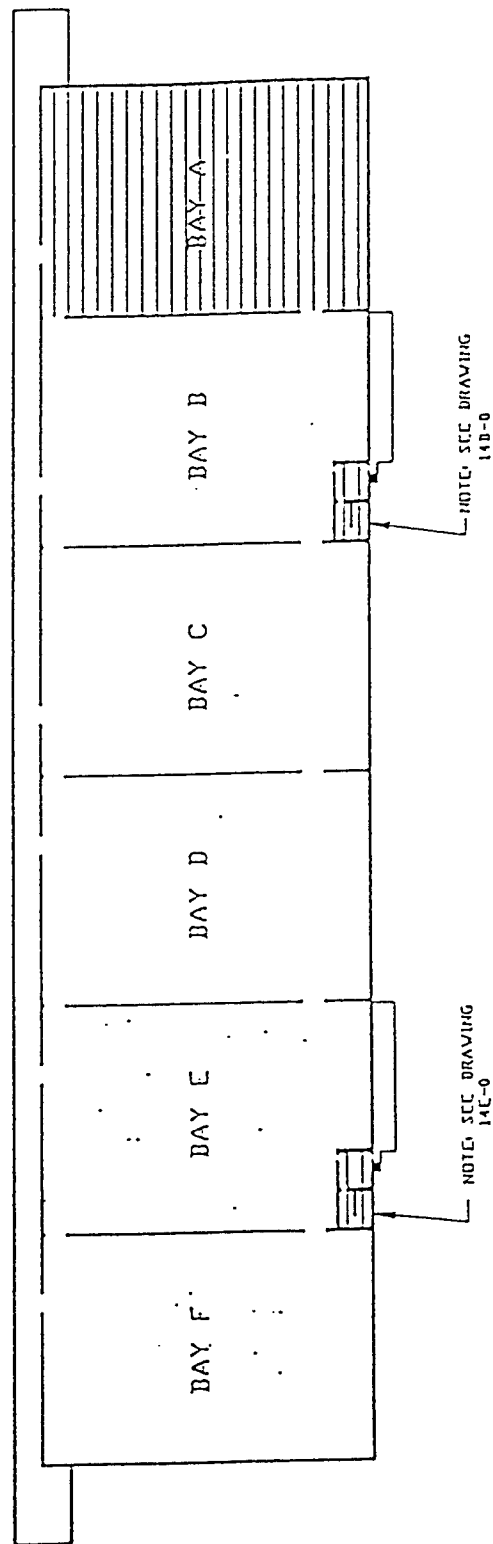


LEGEND

AREAS WITH SUSPECT  
ASBESTOS-CONTAINING MATERIAL



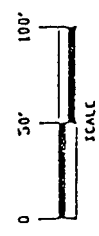
LAWHON & ASSOC.		6330 PROPRIETORS RD.	
(614) 436-8400		WORTHINGTON, OH 43085	
DATE 9-23-92	DRAWN BY BSK	APPROVED BY	
PROJECT BUILDING 815 - GENERAL SUPPLY WAREHOUSE		USAEC	
FULL FLOOR PLAN			
FOLDER LEXINGTON - BLUE GRASS ARMY DEPOT		BLD15-X	
LEXINGTON, KY			



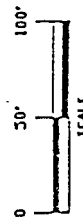
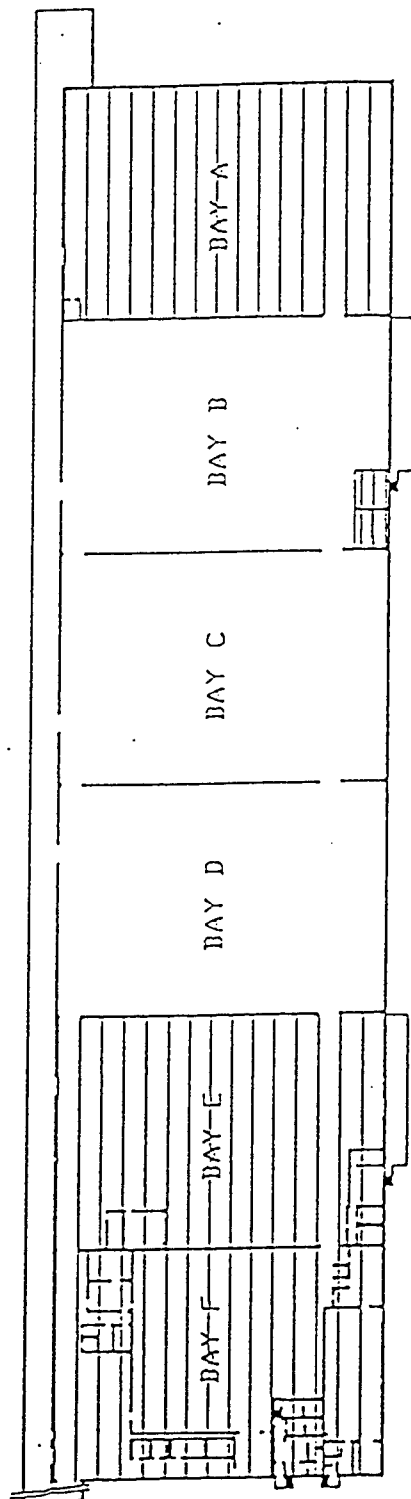
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AREAS WITH SUSPECT ASBESTOS-CONTAINING MATERIAL

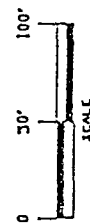
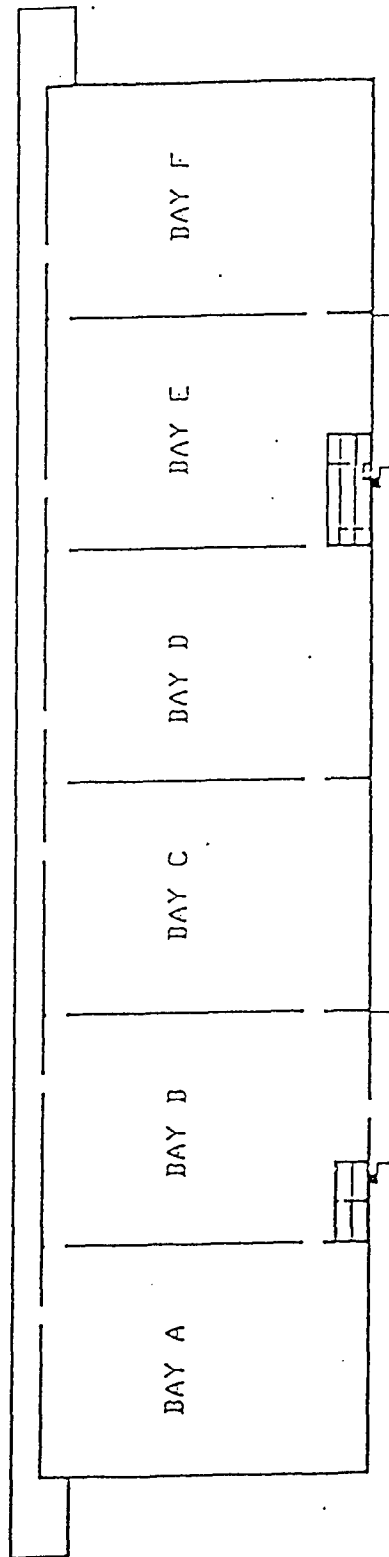


LAWHON & ASSOC.		6330 PROPRIETORS RD	
(614) 436-0400		WORTHINGTON, OH 43085	
DATE 9-22-92	CUSTOMER	USAEC	DRAWN BY BSK
PROJECT BUILDING R14 - GENERAL SUPPLY WAREHOUSE		APPROVED BY	
FULL FLOOR PLAN			
PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT		DRAWING NO.	
LEXINGTON, KY		BLD14-	



LEGEND	
	AREAS WITH SUSPECT ASBESTOS-CONTAINING MATERIALS

LA WATSON & ASSOC., .		6330 PROPRIETORS RD	
(614) 436-0400		WORTHINGTON, OH 43081	
DATE	9-23-92	CUSTOMER	USALC
PROJECT BUILDING RIG - GENERAL SUPPLY WAREHOUSE /		MADE BY	BSK
COMMUNICARY & POST EXCHANGE		APPROVED BY	
FULL CLERK PLAN			
PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT		DRAWING NO.	
LEXINGTON, KY		BLD16-X	



LEGEND	
	AREAS WITH SUSPECT ASBESTOS-CONTAINING MATERIALS



LAWTON & ASSOC.

(614) 436-8400

6330 PROPRIETORS  
WORTHINGTON, OH 43085

DATE 9-24-92

CUSTOMER USACE

PROJECT BUILDING 17 - GENERAL SUPPLY WAREHOUSE

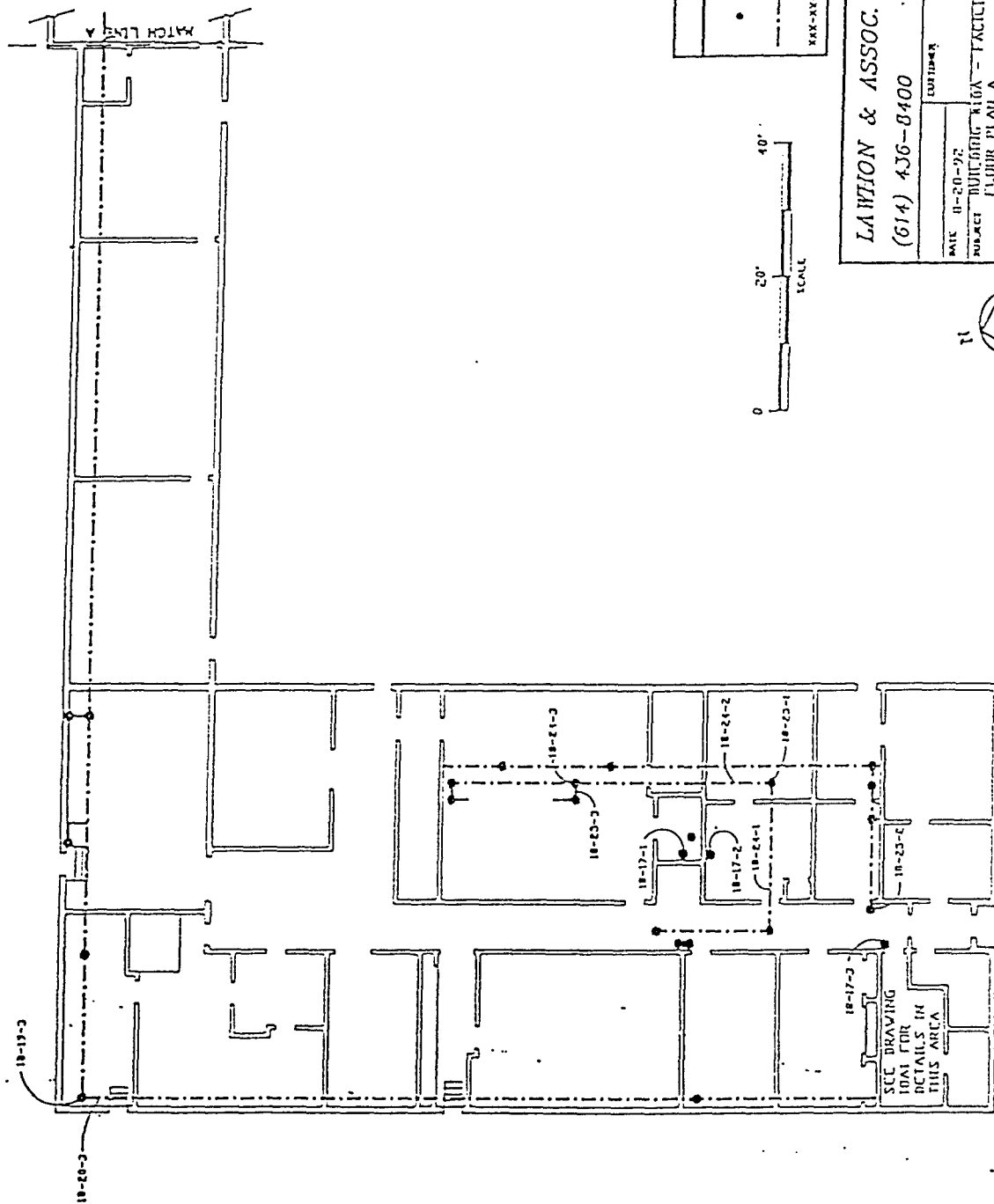
FULL FLOOR PLAN

AREAS WITH SUSPECT ASBESTOS-CONTAINING MATERIALS

PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT

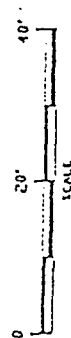
LXINGTON, KY

BLD17-X



# LEGEND

- ONE OR MORE FITTINGS, VERTICAL PIPE RUN OR BOTH
- INSULATED PIPE
- XXX-XX-X SAMPLE NO. & LOCATION



LAWTON & ASSOC.

6330 PROPRIETORS RD.  
(614) 436-8400 WORTHINGTON, OH 43085

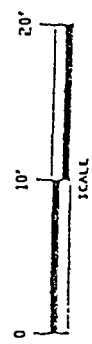
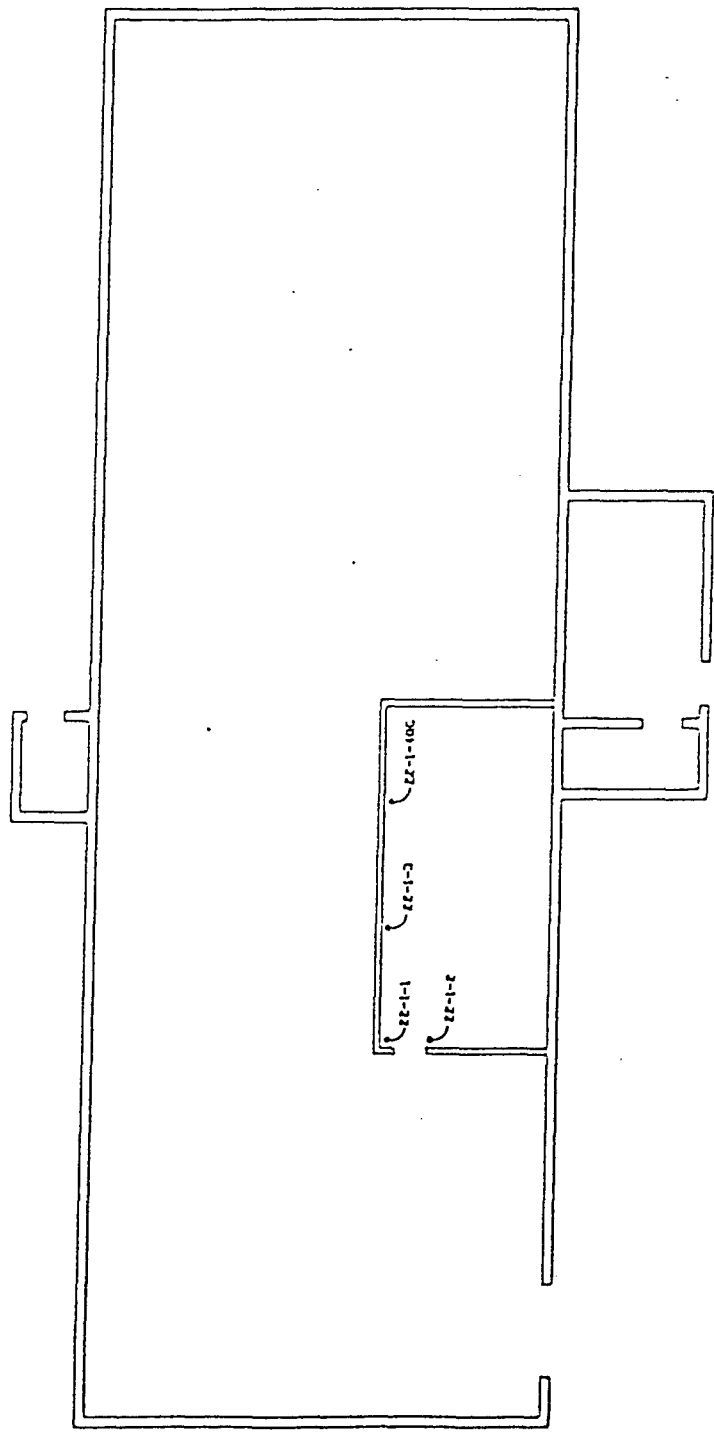
DATE 11-20-92  
PROJECT BUILDING 181A - FACILITIES MAINTENANCE SHOP  
FLOOR PLAN A  
ASBESTOS-CONTAINING PIPE AND FITTING INSULATION  
PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT  
LEXINGTON, KY

USACC

DRAWN BY DSK  
APPROVED BY

BLD18A-P





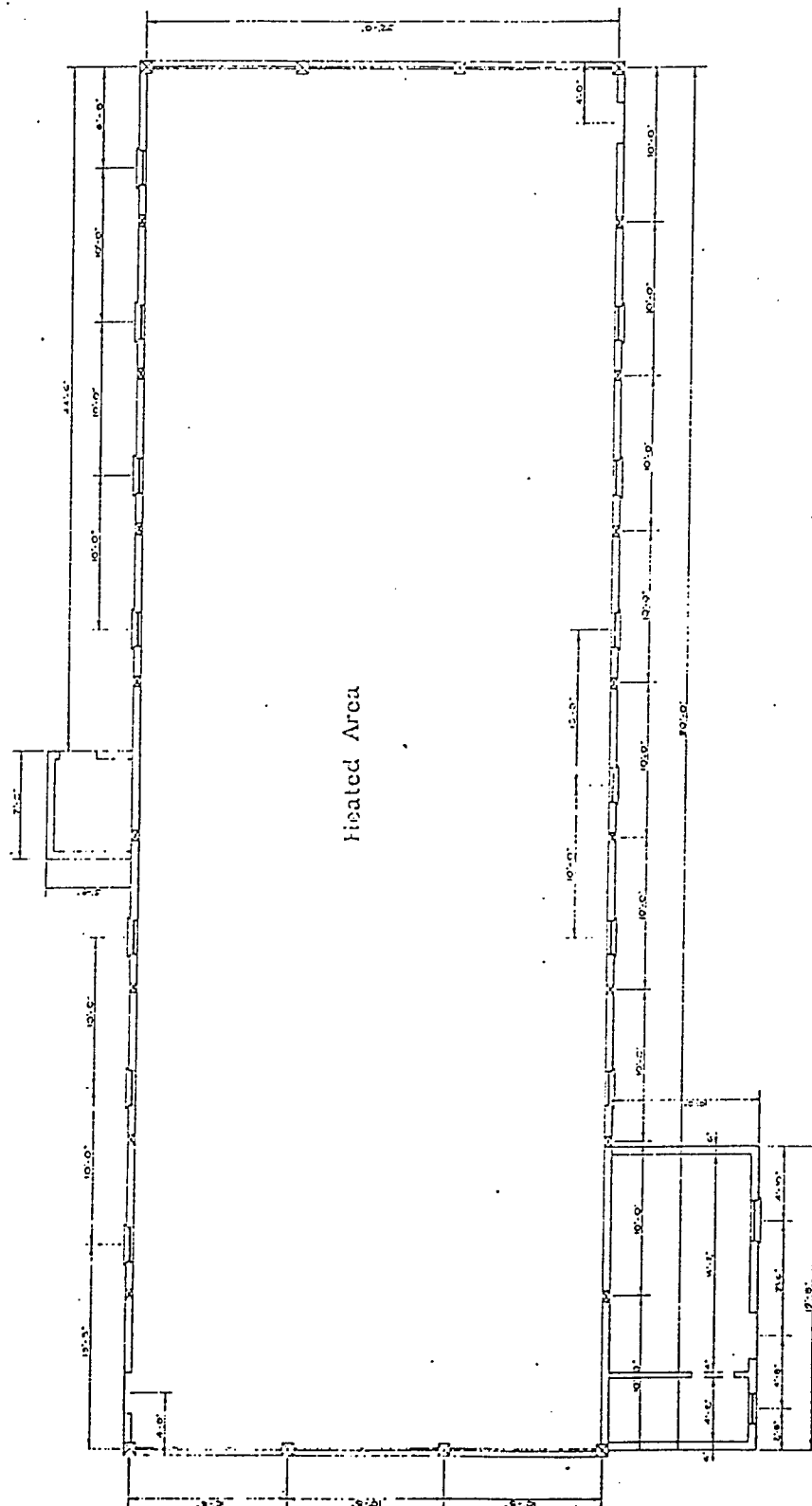
LEGEND

XXX-XX-X	SAMPLE NO. & LOCATION
----------	-----------------------

LAWTON & ASSOC. 6330 PROPRIETORS RD.  
(614) 436-8400 WORTHINGTON, OH 43082

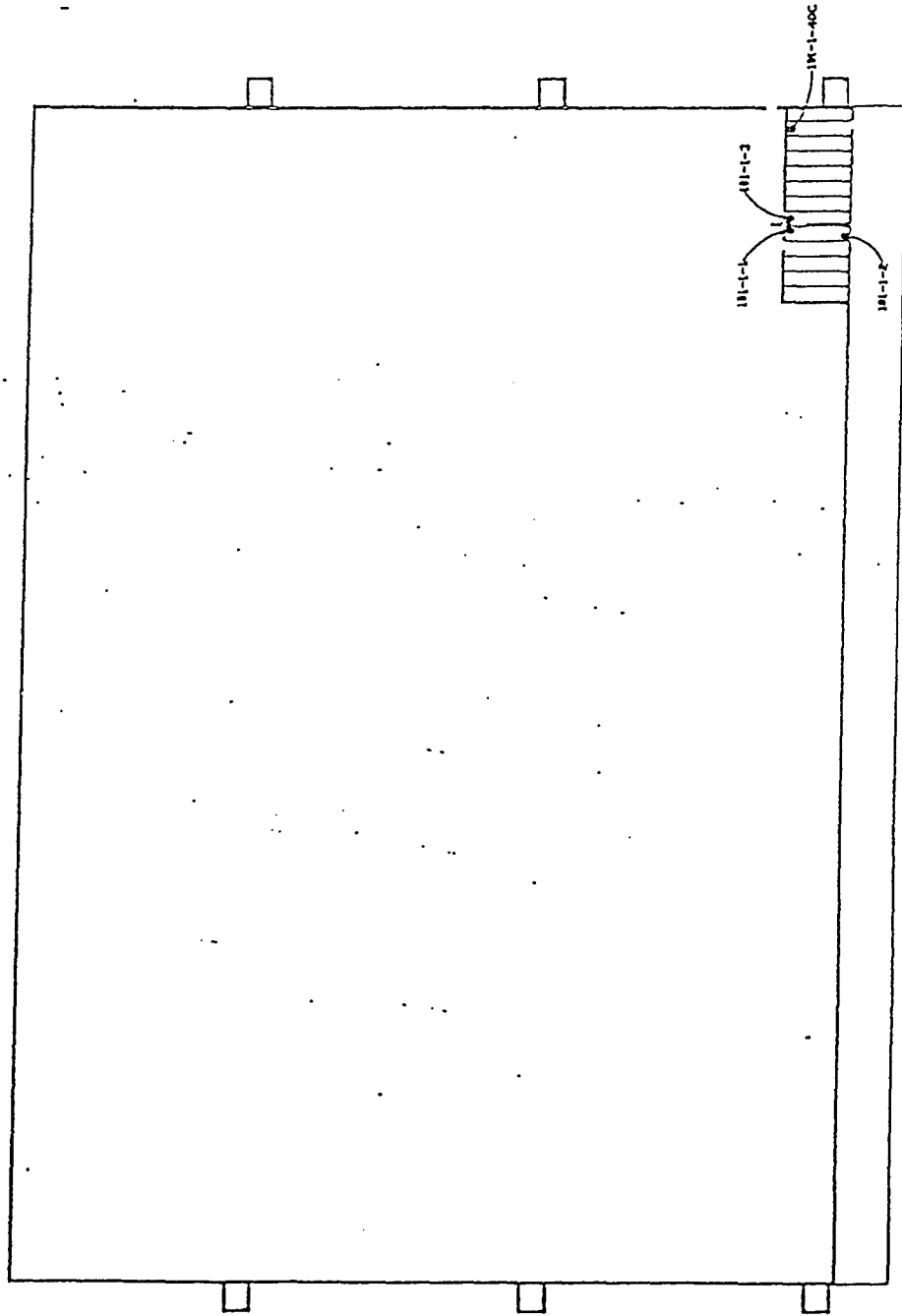
DATE 0-31-92	OWNER USAEC	DRAWN BY BSK
PROJECT BUILDING #22 - VEHICLE STORAGE	APPROVED BY	
FLOOR PLAN		
PROJECT BUILDING #22 - CONTAINING MATERIAL SAMPLING LOCATIONS		
PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT		
DRAWN BY		
BLD22-S		

Fixed Area



1. <u>Personnel</u> 2. <u>Training</u> 3. <u>Equipment</u> 4. <u>Supplies</u> 5. <u>Transportation</u> 6. <u>Communication</u> 7. <u>Medical</u> 8. <u>Food</u> 9. <u>Shelter</u> 10. <u>Security</u> 11. <u>Intelligence</u> 12. <u>Public Affairs</u> 13. <u>Other</u>	1. <u>Personnel</u> 2. <u>Training</u> 3. <u>Equipment</u> 4. <u>Supplies</u> 5. <u>Transportation</u> 6. <u>Communication</u> 7. <u>Medical</u> 8. <u>Food</u> 9. <u>Shelter</u> 10. <u>Security</u> 11. <u>Intelligence</u> 12. <u>Public Affairs</u> 13. <u>Other</u>
--	--

## Distribution & Transportation



LEGEND

7X9 DARK BROWN FLOUR TILE

XXX-XX-X SAMPLE NO. & LOCATION

LARTION & ASSOC. 6330 PROPRIETORS RD.  
(614) 436-8400 WORTHINGTON, OH 43085

DATE 9-1-92

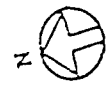
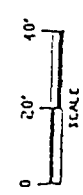
PROJECT 1M-1-400 - GENERAL SUPPLY WAREHOUSE

CONTRACTOR USAEC

PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT

LEXINGTON, KY

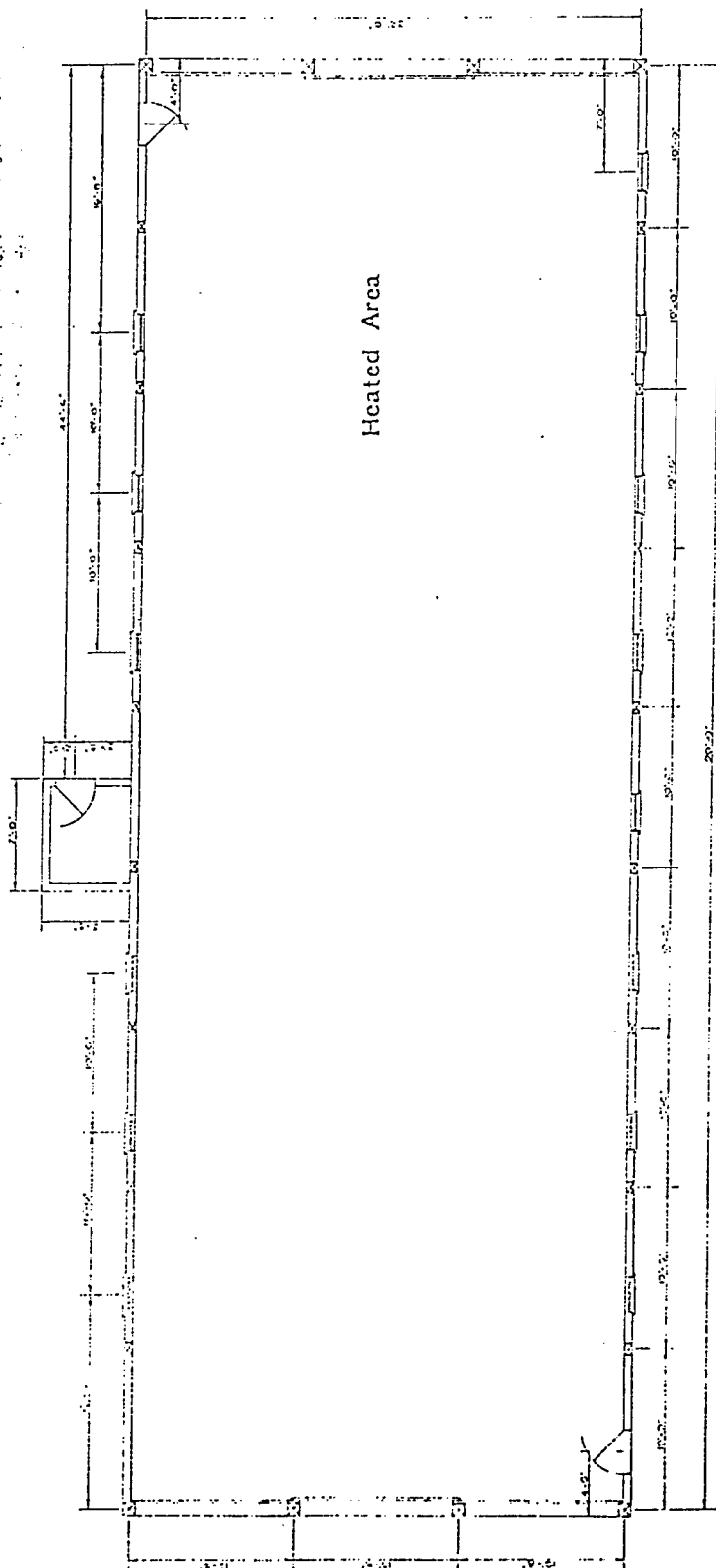
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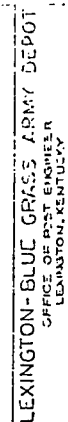


Heated Area

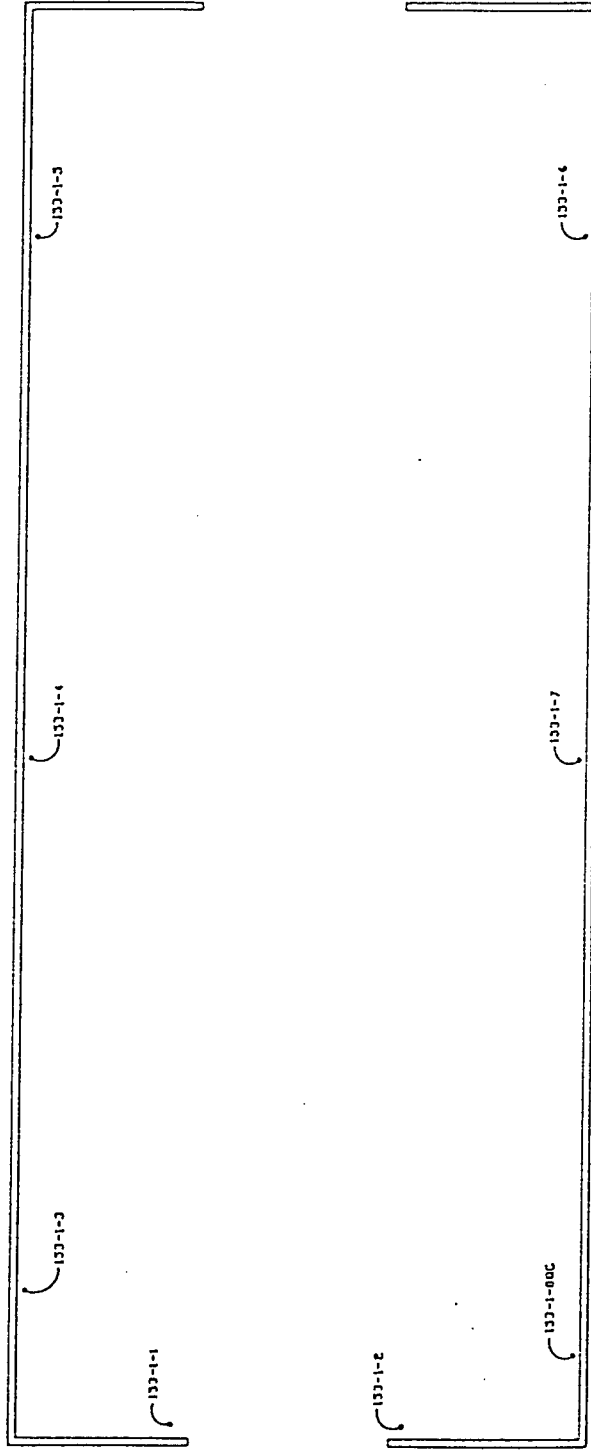


## Distribution & Transportation

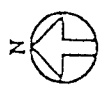
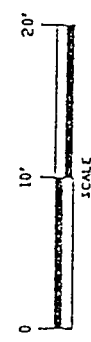
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## Distribution / Transportation



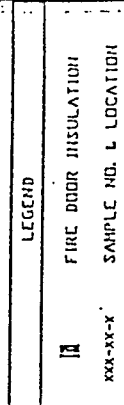
LEGEND	
XX-XX-X	SAMPLE NO. & LOCATION



**LAWTON & ASSOC.** 6330 PROPRIETORS RD.  
 (614) 436-8400 WORTHINGTON, OH 43085

DATE 10-7-92	CUSTOMER USAEC	MADE BY JSK
SUBJECT BUILDING #153 - SALVAGE STORAGE BUILDING		APPROVED BY
FLOOR PLAN		
MINI-ASBESTOS-CONTAINING MATERIAL SAMPLING LOCATIONS		
PROJECT LEXINGTON - BLUE GRASS ARMY DEPOT		MADE BY
LEXINGTON, KY		

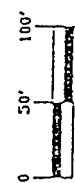
BLD153-S



LAWTON & ASSOC.  
(614) 436-8400  
6330 PROPRIETORS RD.  
WORTHINGTON, OH 43085

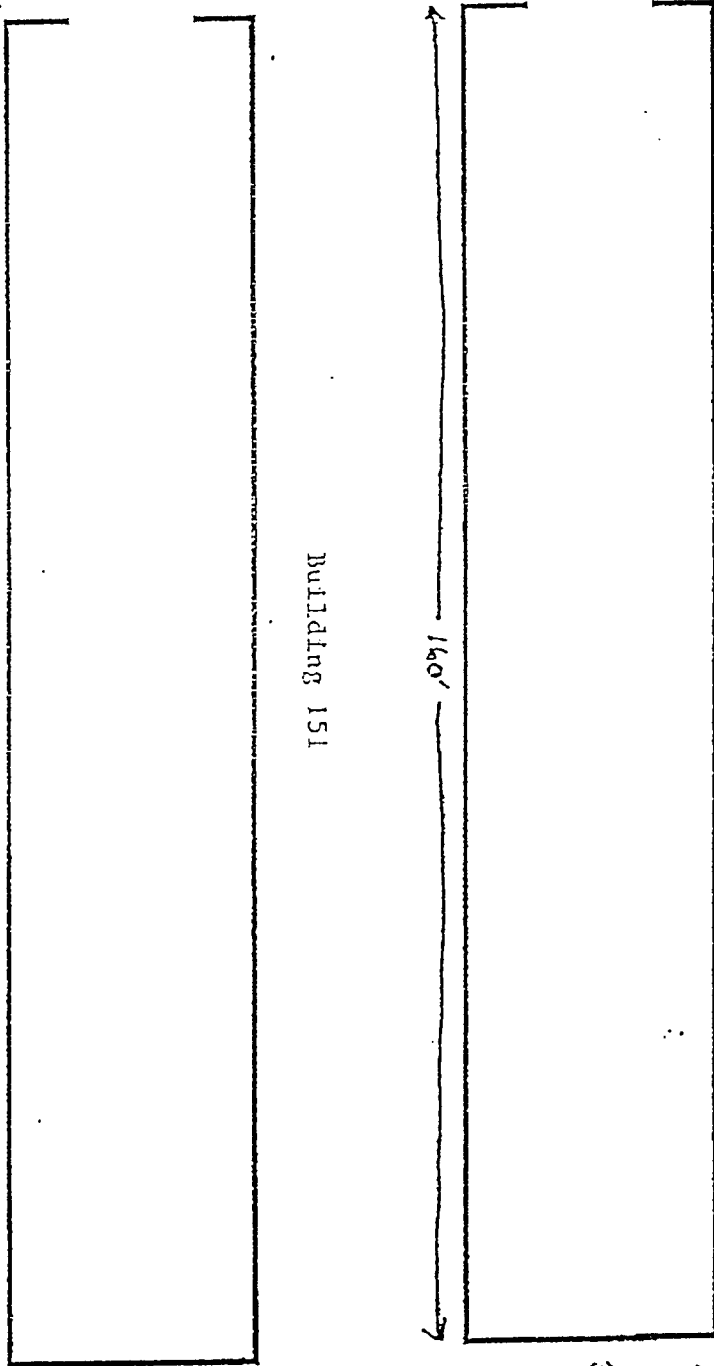
DATE	9-29-92	CONTINUED.	USAC	MAILED BY	JSK
				APPROVED BY	

ASBESTOS-CONTAINING FIRE DOOR INSULATION	MAVROG MD BLD220-FD
FULL FLOOR PLAN	
WALLING, K220 - SHIPPING AND RECEIVING	
SUBJECT	LEXINGTON - BLUE GRASS ARMY DEPOT LEXINGTON, KY







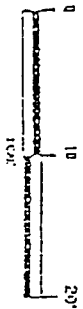
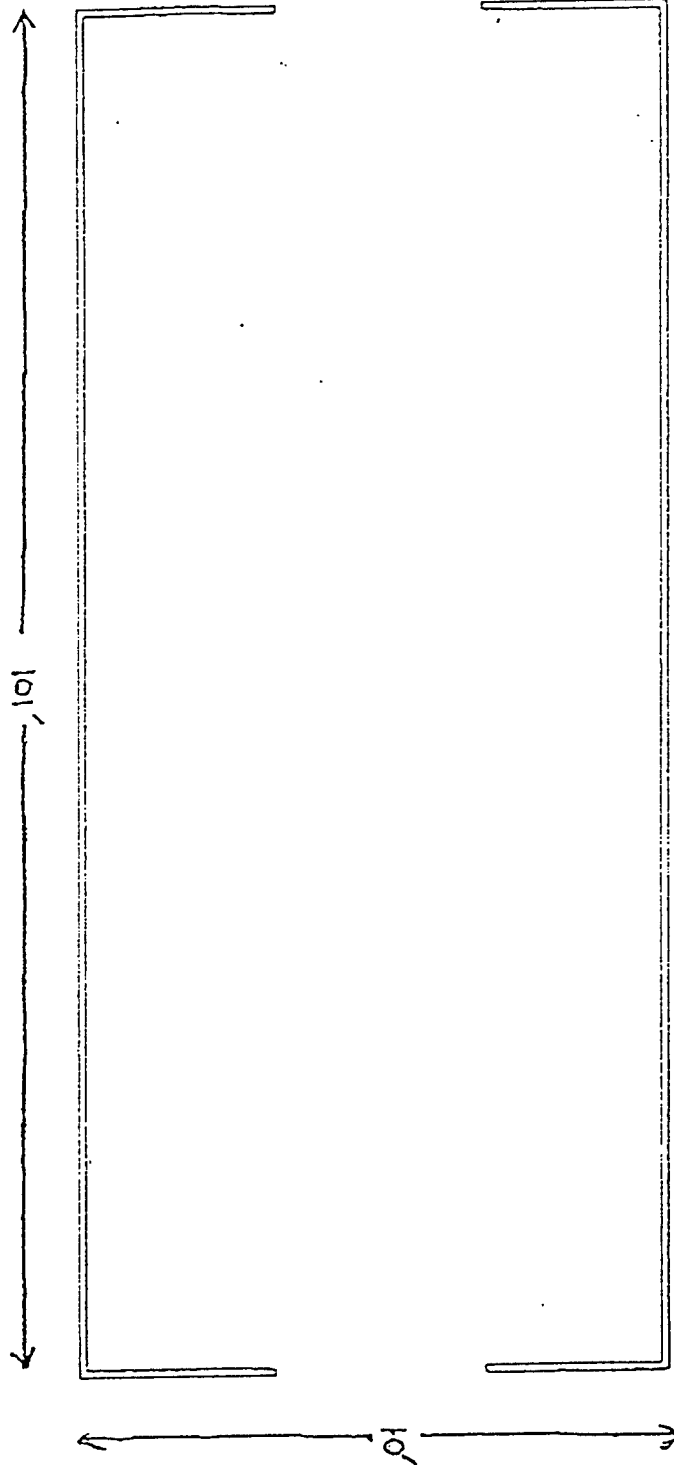


Building 150

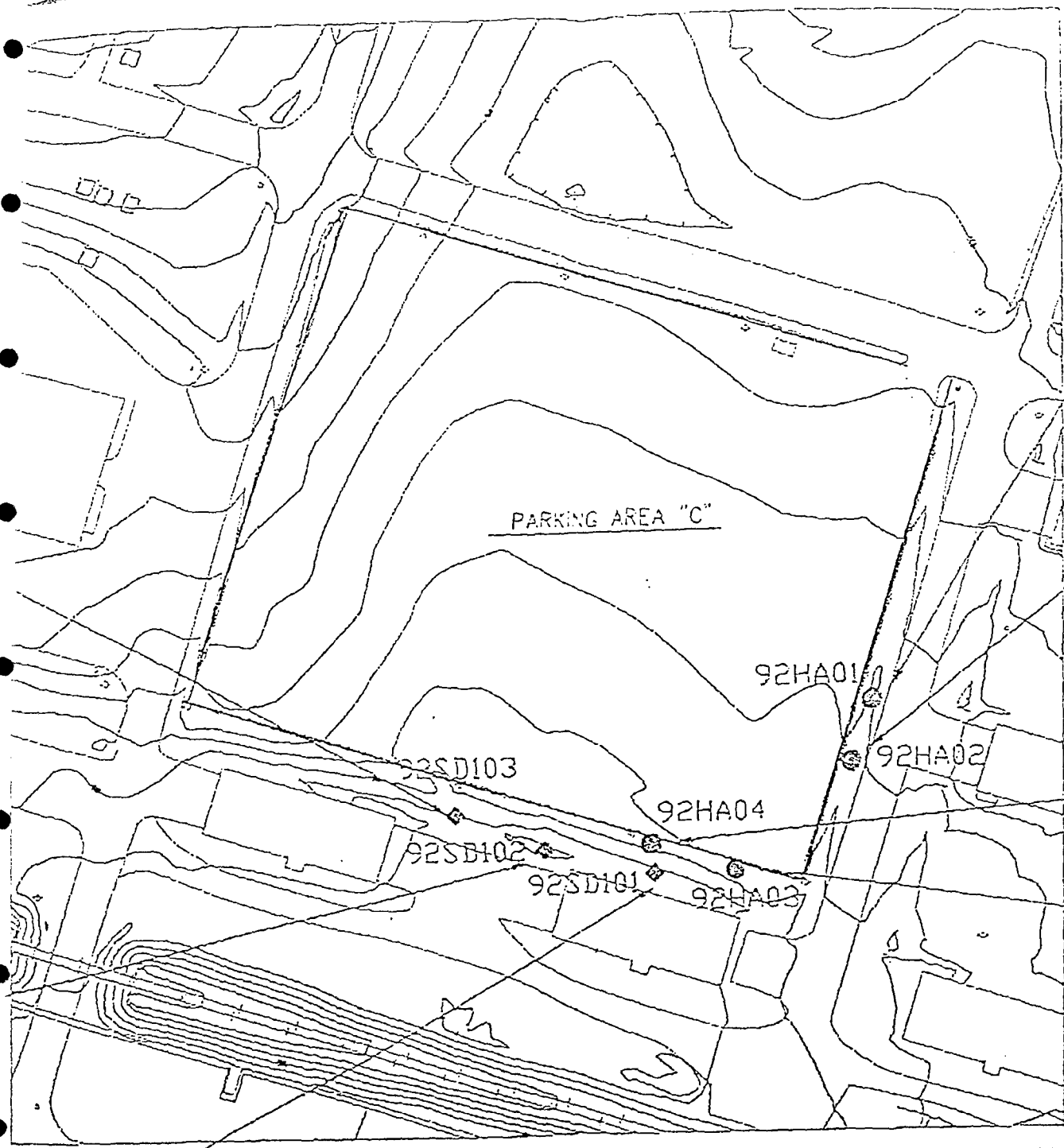
Building 151

Bluegrass Station  
Lexington, Kentucky

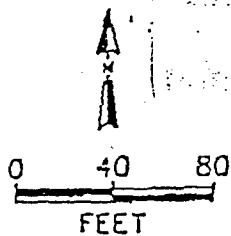




Building 152  
Bluegrass Station  
Lexington, Kentucky



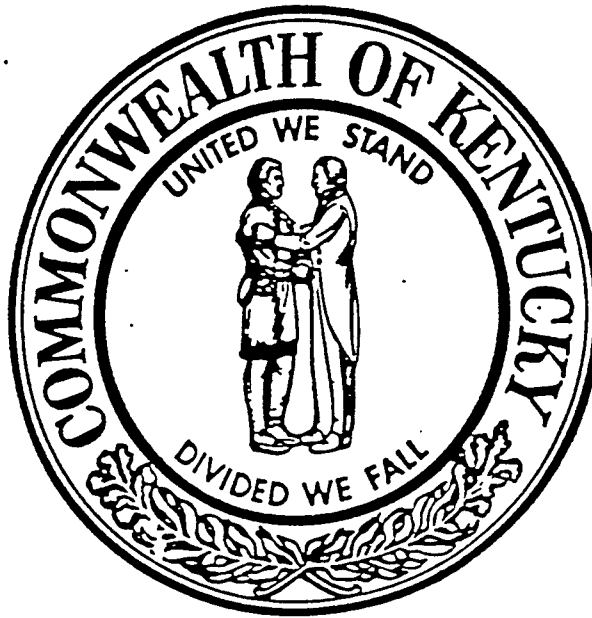
PARKING AREA C



**APPENDIX C**

**COMMONWEALTH OF KENTUCKY**

**REUSE PLAN**



LEXINGTON FACILITY  
BLUEGRASS ARMY DEPOT  
LEXINGTON, KENTUCKY

REUSE PLAN

SUBMITTED BY:  
COMMONWEALTH OF KENTUCKY

FEBRUARY 1995

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3. Economic Development .....	9
4. Acquisition Strategy .....	12
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## COMMONWEALTH REUSE PLAN

### 1. EXECUTIVE SUMMARY

The Commonwealth of Kentucky Reuse Plan for the Lexington Facility identifies potential reuses of the land and associated buildings that will become available with the closing of the Lexington portion of the Lexington Bluegrass Army Depot (LBAD), hereinafter referred to as the Lexington Facility. The map at Appendix 1 graphically displays the land uses recommended in the Reuse Plan.

#### 1.a. Economic Development/Sustainment

Mitigation of negative economic impacts as a result of facility closure is an important goal of the Commonwealth of Kentucky's Reuse Plan. The existing warehouses are seen as offering the best economic development potential. Most of the buildings are physically and functionally adaptable to supporting light industrial uses. Thus, the recommended development for a successful overall reuse is an anchoring industrial use.

Currently, the employment level is 640 personnel at the facility, and over the next three to five years, employment is projected to increase to 1,500-2,000 personnel. The main focus of the Commonwealth is to generate additional employment opportunities in order to optimize the utilization of the total available structures on the installation. The target goal for a maximum employment level is 3,000 personnel.

#### 1.b. Acquisition Strategy

Under Title XXIX of the 1994 National Defense Authorization Act, the Local Redevelopment Authority acting on behalf of the Commonwealth of Kentucky will request an Economic Development Conveyance (EDC) for 107 buildings and 570 acres to be utilized for like use. In addition, the Commonwealth intends to request a public benefit conveyance (PBC) for 6 buildings and 210 acres for recreational use. Coordination with the U.S. Department of Interior (Parks and Recreation) will be made by the Commonwealth.

#### 1.c. Overall Reuse Concept

The land scheduled for disposal by the Army includes approximately 780 acres less Building 4, and it will be utilized for similar uses such as administrative, small unit training, recreational, commercial, limited/existing residential (facility employees only) and light industrial.

The Commonwealth of Kentucky has set aside approximately 210 acres of land for public recreational use. This property was leased to the Lexington-Fayette Urban County Government for operation of the public recreational facilities.

#### 1.d. Federal Retention

The Department of Defense has set aside Building 4 for Federal retention as a site for the operations of the Defense Finance and Accounting Service (DFAS).

#### 1.e. Infrastructure Support

All utilities will be metered and provided by the appropriate utility providers, i.e., Kentucky Utilities, Kentucky American Water Company and Columbia Gas. The Lexington-Fayette Urban County Government (LFUCG) assumed responsibility for the operations of the sewage treatment plant and the water distribution system on August 3, 1994.

The infrastructure that is in place should be sufficient to support the activities of a light industrial park employing 3,000 people. The only exception to infrastructure support operations is the central heating plant which previously supplied heat to the majority of the buildings. Continued operation of the plant is not economically feasible due to age and obsolescence. The obvious heating alternative is installation of independent heating systems for each building.

#### 1.f. Integration To Urban Fabric

The Lexington Facility is located 14 miles east northeast of the City of Lexington, Kentucky. In this location, there is no conflict with urban traffic patterns or community activities.

#### 1.g. Thoroughfare Plan

The facility is currently leased to the Commonwealth of Kentucky. The Commonwealth has expressed an intent to acquire the facility subject to terms and conditions not yet established. After acquisition, the facility will not be open to the general public. As a result, a separate entry to the proposed public park and recreational facilities will be constructed and maintained.

#### 1.h. Land Use Pattern

Table 1 reflects previous and proposed land use patterns at the Lexington Facility. The chart reflects little difference between past activities on the installation and proposed activities in the future. Therefore, it is consistent with the like use concept envisioned for the facility.

TABLE 1  
LAND USE PATTERNS AT THE LEXINGTON FACILITY

LAND USE	PREVIOUS **		PROPOSED	
	ACRES	PERCENT	ACRES	PERCENT
Operations	16	2	16	2
Maintenance	20	3	20	3
Supply/Storage	99	13	110	14
Administration	27	3	27	4
Troop Housing	2	*	2	*
Family Housing	11	1	11	1
Commercial Services	3	*	3	*
Utilities	12	1	12	1
Recreation	168	22	210	27
Training/Reserve Buffer	419	54	366	47
Water Areas	3	*	3	*
Total	780	100	780	100

\* Less than 1 percent.

\*\* Source: U.S. Army Center for Health Promotion and Preventive Medicine (formerly U.S. Army Environmental Hygiene Agency (USAEHA), 1988).

#### 1.i. Environmental Considerations

The Lexington Facility has operated as a light industrial operation since inception in 1941. While command structures and missions have varied over the ensuing years, all activities conducted on the facility have been consistent and compatible with the industrial nature of the installation. The future activities envisioned in this reuse plan for the Lexington Facility are similar in nature to and compatible with past activities of an industrial nature conducted on the installation. As a result of like use activities, it is anticipated that environmental remediation of the installation will be consistent with requirements necessary to conduct those types of activities in the future.

While remediation of some areas is required, past activities have not resulted in the exclusion of day to day operations on the installation. The limited residential facilities on the installation will continue to be used for that purpose by Commonwealth employees. Any future residential construction will be confined to the existing residential area. Any industrial construction will be in conformance with applicable environmental considerations.



## 2. INTRODUCTION

This section presents an overview of past and current operations at Lexington Bluegrass Depot and a general description of the facility. The information contained in this section was obtained from multiple sources and is not intended to be all inclusive of every activity which has occurred on the installation. However, activities relative to future reuse initiatives are contained in this section.

### 2.a. General Background

The Lexington Bluegrass Army Depot was established as a signal depot on June 25, 1941. The facility was constructed in 1941-1942 for the storage of ground radar, other classified radio equipment and special vehicles required to transport radar. By the end of the war, the administration building, eight warehouses, the motorpool building, the power plant and 40 woodframed concrete-based temporary buildings had been constructed. Following the war, additional facilities had been added almost yearly as required by mission changes or expansion. An industrial maintenance shop, two warehouses and seven housing units were constructed in the 1950's. Through the 1960's and 1970's, a total of 10 buildings were constructed, including an electronics and communications and security equipment maintenance facility and seven warehouses. Currently, the Lexington Facility has approximately 113 buildings.

Since the installation was established in 1941, it has come under the command of a number of authorities. It was put under the jurisdiction of the Army Materiel Command (AMC) in August 1962. In 1977, it underwent a change in mission and function; it was assigned depot activity status and placed under the command of Red River Army Depot, Texas. Command was transferred to Anniston Army Depot, Alabama, in July 1980. In September 1986, Lexington Bluegrass Army Depot was placed under the Depot System Command, Chambersburg, Pennsylvania.

As of 1990, Lexington Bluegrass Army Depot served as the center of technical excellence for Communications Security Support. It was the only depot in the depot system for storage and overhaul of this vital equipment. It was the sole facility for the Automatic Secure Voice Communication System, and it has been used as a major storage depot for supplies such as dry cell batteries, clothing and textiles, tungsten, tin, quartz crystals and crude rubber.

The following tenants occupied Lexington-Blue Grass Army Depot in 1990:

- \* Army Materiel Command's Materiel Readiness Support Activity
- \* The Central Test, Measurement and Diagnostic Equipment Activity
- \* The U.S. Army Depot System Command, Quality Systems Engineering Center
- \* The Defense Reutilization and Marketing Offices
- \* The Army Calibration Repair Center
- \* The Ionization, Radiation, Dosimetry Center
- \* Serv-Air, Inc.
- \* Procurement
- \* Commissary and Post Exchange
- \* The USA Health Clinic
- \* The Information Systems

The following tenants currently occupy facilities on the installation:

- \* Serv-Air, Inc.
- \* The Ionization, Radiation, Dosimetry Center
- \* The Commonwealth of Kentucky

Additional information concerning specific activities for selected buildings is available in the April 1994 Community Environmental Response Facilitation Act (CERFA) Report.

## **2.b. General Description**

The Avon facility of the Lexington Bluegrass Army Depot contains approximately 780 acres. It is located almost totally in Fayette County, with only 40 acres in Bourbon County. There are no structures in the Bourbon County portion. As the county line follows a ridgetop, the boundary is irregular, causing the Bourbon County portion to be split into three parcels. Two, near the northwest corner, are very small. A security fence surrounds the entire facility. In addition, security fences split the installation into three sections: the administration building and associated parking lots, the industrial/warehouse area and the recreational and housing area plus the agricultural land.

A mainline of the CSX Railroad runs along the south line for approximately .85 miles. Rail access to the facility is provided by a siding which connects to the CSX line at the installation's southeast corner. The east side of the facility has approximately 1.35 miles of frontage on Briar Hill Road. All of the gates on this side are closed except for the main gate and

one at the southeast corner to allow access to the large parking lots. A gate located about .4 miles southwest of the northeast corner can be opened to provide access to the north end of the recreational area. The residential area and the south end of the recreational area can be reached by opening a gate just north of the main entrance. The west side has a .2 mile frontage on the Houston-Antioch Road, with the only gate on the west side being on this road. Ware Road provides the most road frontage on the west side (approximately 1.55 miles), but there is no gate leading to it.

The roads and parking lots are all paved with bituminous material. The roads are in need of repair and the parking lots are showing a lack of care in many places. This is especially true on the west end of Parking Lot B, which is used for outdoor storage. Parking Lots A, B and C are enclosed with a security fence. A security fence divides lot B into east and west sections. The east end is lighted and used for employee parking. The area identified as transitory shelter is actually a paved lot which is being used as outside storage. The facility's chain link fence is in fair condition. The rail sidings are in fair condition and extend to all the major industrial/warehouse buildings. In addition, Building 101 (warehouse) and a cluster of smaller buildings on the northwest corner of the complex are served by a rail siding.

The water tower has an estimated capacity of 100,000 gallons and is in marginal condition. The wells on the facility are available to provide extra water needed in case of a fire-fighting emergency. Kentucky American Water Company supplies the water for regular use. The main water source comes in from the west and supplies all of the facility, except for family housing. The water supply for the family housing comes in from the east side. A private sewage system is maintained on the facility and requires a licensed operator at all times. Electricity is provided by Kentucky Utilities. In addition to the facility substation, there is a relay station near the south line. Natural gas supply is available to the family housing area; however, there is no natural gas availability to the industrial area. Those buildings not connected to the central steam heat system were heated by propane gas or fuel oil, with few exceptions. The majority of the warehouse space is unheated.

### 3. ECONOMIC DEVELOPMENT

Economic impact considerations for the facility are based on two principle levels: the Facility Level (a broad-brush overview) and the Site Level (site-by-site analysis). The considerations attempt to accommodate issues related to access, utility support and development requirements. The constraints and opportunities associated with these three issues are used to identify potential land uses at the Facility Level and at the Site Level.

In addition to industrial and recreational activities, specialty businesses may capitalize upon the type of atmosphere and people that utilize the area. Some of the businesses could include food service, light retail, pharmaceuticals and laundry services which could prosper within this environment.

#### 3.a. Economic Development Objectives

The Commonwealth Reuse Plan has five primary economic development objectives:

1. To replace both the jobs and wages lost through the closing of the Lexington Facility;
2. To optimize municipal revenue streams through private sector redevelopment of the installation;
3. To redevelop the Lexington Facility area in a manner which redefines and enhances the image of the region;
4. To strengthen the local economy by developing complementary market sectors appropriate to the demographics of the community;
5. To provide planning for infrastructure systems improvements which will support the preferred reuse alternatives.

The region provides important opportunities for reutilization. In addition, the presence of the installation has traditionally been a focal point of industrial activity for the northeast area of Lexington, and the loss of that image asset must be recognized as a factor in the Reuse Plan.

#### 3.b Jobs Lost

Jobs lost as a result of the closing of the Lexington Facility involve consideration of three separate and distinct affected groups: Lexington Facility military positions/payroll, Lexington Facility civilian positions/payroll and indirect positions/payroll. The most difficult economic impact to assess will be the indirect job losses which will occur as a result of the

closure. The most obvious indirect job losses include providers of contracted goods and services to the Lexington Facility. Less obvious indirect losses will include those to the local economy resulting from the loss of payroll by Lexington Facility personnel and per diem expenditures by visitors to the installation.

Table 2 illustrates the estimated or known declines in employment for the categories listed above.

TABLE 2

	April 1966	1988	Current
Military	89	22	0
Facility Civilian	3,958	1,299	23
Other/Contractor	384	413	617

According to a 1990 analysis by Dr. Lawrence Lynch, consulting economist for the Lexington Depot Redevelopment Committee, 1,767 civilian jobs would be lost from the installation plus an estimated 1,142 indirect jobs for a total of 2,909 jobs. The loss of job and salary income would be \$67.7 million, with the impact of these losses being felt most heavily in the Fayette County area (Lexington in absolute terms), and relatively most heavily in Clark County (Winchester).

### 3.c. Employment-Current/Projected

Table 3 exhibits the current and projected levels of employment for the Lexington Facility through the year 2000 and beyond. Employment levels projected for the year 2000 are reasonable objectives attainable based on current projections. Employment levels for FY2000+ are goals which may not be attainable given current market conditions.

TABLE 3

	Current	FY2000	FY2000+
Commonwealth Employees	89	200	200
Federal Employees	23	150	150
USSOCOM	500	650	650
DFAS	0	750	750
Other Tenants	28	100	1,250
Totals	640	1,850	3,000

### **3.d. Fiscal Considerations**

The Commonwealth has appropriated \$1 million for facility upgrade and equipment acquisition. This is an economic development bond established to facilitate the installation's marketability for future economic growth. The Defense Finance and Accounting Service projects a \$6.1 million expenditure to upgrade and equip Building 4 by FY 1998. Future acquisition of the property by the Commonwealth is subject to EDC and PBC approval.

### **3.e. Demographics**

Local demographics are not expected to be affected by the Reuse initiatives.

### **3.f. Complementary Market Sectors**

The Lexington Facility resides within the Lexington market sector; however, retail goods and services are centered within New Circle Road and Man-of-War Road corridors which provide limited capability within the immediate Lexington Facility area. The absence of retail and commercial establishments in the vicinity of the installation provides an excellent opportunity for development and growth of these activities on the installation in support of the work force and surrounding community.

#### 4. ACQUISITION STRATEGY

The acquisition strategy for the Commonwealth is comprised of two possible mechanisms: Economic Development Conveyance (EDC) and Public Benefit Discount (PBD).

The only viable alternative for acquisition of most of the Lexington Facility is an EDC based on authorization in Title XXIX of the 1994 National Defense Authorization Act (NDAA). The Commonwealth is prepared to assemble a package requesting an EDC in accordance with the new guidelines prepared by the Office of the Secretary of Defense. Approximately 570 acres and the majority of buildings will be requested under this conveyance.

Alternative conveyance mechanisms to the economic development conveyance have been reviewed but will not facilitate economic recovery for the site for the following reasons:

- Condition of the facilities restrict re-use to light industrial.

- The Commonwealth has agreed to assume title with deed restrictions for "like use", industrial use, relieving the federal government of \$27 million in clean-up cost.

- The Commonwealth views redevelopment as viable only at no acquisition cost in light of an estimated \$9.3 million infrastructure investment required.

Further discussion of why other mechanisms are not viable is addressed in detail in the Economic Development Conveyance.

Approximately 210 acres of the installation have been identified for continued utilization as public park and recreational land. The Commonwealth intends to acquire this land through a public benefit discount in coordination with the Department of Interior (Parks and Recreation). There are existing recreational facilities on the installation in varying states of disrepair. As a result of their condition, the estimated value is minimal other than the value of the property as undeveloped land. Acquisition by PBD allows the Commonwealth to establish public recreational facilities on the installation which may then be used by employees as well as members of the local community at large. A separate access to the recreational facilities will be established in order to preclude traffic intrusion into the industrial complex area. The Commonwealth will initiate coordination with the Department of Interior during second quarter FY 95 for submission of the request for PBD conveyance.

In the event that the Commonwealth does not qualify for an EDC or PBD, the Commonwealth will cease its capital investment and operation/maintenance role in the site. The Commonwealth goal for completing EDC/PBD requests is March 1995. The goal for concluding negotiations for acquisition is July 1995.



## 5. OVERALL REUSE CONCEPT

After assessing the condition and configuration of existing buildings at Lexington Facility, a number of conceptual conclusions have been reached.

1. The Lexington Facility is dominated by industrial and administrative space which will be difficult to absorb into the local economy.
2. Structures at the Lexington Facility must meet local building codes and standards for like use.
3. The local economy is fragmented but retains the wealth to support new development without distressing other local development.
4. The layout of the local thoroughfare system meets the requirements to support increased employment at the installation.
5. Light industrial development and warehouse distribution appear to generate the greatest economic development opportunity for the community as a whole.

These conclusions lead to a Reuse Plan which supports immediate initiation of action to capitalize on the potential for light industrial development and recreational use at the Lexington Facility. In pursuit of that end, Commonwealth representatives have examined the real estate at the facility and determined that the best opportunity for capturing such development would result from pursuing reuse of those sites which currently have existing like use structures.

By creating a Reuse Plan which is driven by utilization of these sites early in the closure process, the gap in time between closure and redevelopment is narrowed significantly, reducing economic distress in the community.

### 5.a. Industrial Uses

The benefit of light industrial uses is that they generally pay good wages and generate a high ratio of jobs per acre. The Lexington Facility has several locations which could provide solid site benefits for light industrial operations, especially those with direct rail access.

Statistics show that light industrial jobs generate the highest wages and the highest resulting municipal revenues, and as such, will be emphasized in the Reuse Plan. The marketing effort for light industrial uses can also be enhanced through cooperation

with such agencies as the Kentucky Cabinet for Economic Development and Kentucky Utilities, which both participate in industrial development activity in the area.

While industrial development provides marginally greater cash flow at a number of levels, it does not alter or re-focus personal behavior in a way which could unite the neighborhood community. Therefore, the appropriate balance of light industrial/warehouse and retail development must be sought if the community is to be enhanced.

#### 5.b. Recreation

Many recreation opportunities are available at the Lexington Facility; however, many of the recreation facilities are currently in varying states of disrepair. Outdoor facilities include a softball field, swimming pool, four tennis courts, horseshoe pits and picnic grounds. Lake Elder is within the recreational portion of the Lexington Facility, but it is unavailable for fishing or swimming. There are currently no indoor recreational facilities on the installation.

The Commonwealth of Kentucky intends to aside approximately 210 acres of land for public recreational use. The Commonwealth has leased this area to the Lexington Fayette Urban County Government for operation of the public recreational facilities. The Commonwealth intends to request a public benefit conveyance (PBC) of 6 buildings and 210 acres for public recreational use. Coordination with the U.S. Department of Interior (Parks and Recreation) will be made by the Local Redevelopment Authority on behalf of the Commonwealth. The utilization of this property for public recreational purposes will provide employees and the surrounding community with additional recreational outlets.

#### 5.c. Small Unit Training

The Lexington Facility initiated a reserve component training program in the 1970's. The program remained active through the early 1990's. A number of states and Puerto Rico participated in small unit training and related logistical operations during this period. These activities were carried on in both the cantonment area and in the non-industrial area during both weekends and annual training periods. An average of 20 reserve units per year conducted training on the installation.

It is proposed that like-kind training will continue on approximately 330 acres. It is anticipated that the maximum size of the organizations participating in small unit training will be squad, section or platoons under company level control. The frequency of training will continue to be of a weekend or annual training nature.

#### **5.d. Limited Retail Development**

Local estimates of the market areas suggest that limited commercial reuse alternatives may be viable at the Lexington Facility. The potential advantage of limited retail development is due to the absence of any retail activity in the vicinity. Retail development at Lexington Facility carries one overriding benefit to the local area. By establishing employee based services, a significant benefit to the installation employees will be made available.

#### **5.e. Limited Residential Uses**

Existing residential facilities on the installation will continue to be used, as in the past, for installation employees. There are 15 sets of quarters on the installation and 1 unaccompanied personnel housing facility. There will be no new residential construction on the facility in any area other than areas currently utilized as residential.

#### **5.f. Office Uses**

The development of new office space is usually considered a solid economic development opportunity for a community, but the case of Lexington Facility is different. According to current estimates, Lexington Facility has a total of 115,377 square feet of office space, excluding Building 4. This space is generally not in Class "A" condition. It is sufficient to say that, considering these factors alone, it is counterproductive to propose that new office space be built on available land. There is sufficient office space available on the installation to accommodate present and future requirements. Therefore, office uses are not a significant factor of the Reuse Plan.

#### **5.g. Federal Retention**

The Department of Defense has set aside Building 4 for Federal retention as a site for the operations of the Defense Finance and Accounting Service (DFAS). Support services may be provided by the Commonwealth as negotiated between the Commonwealth and DFAS.

#### **5.h. Restricted Areas**

There are three landfills on the installation which will be capped as a remediation measure. These landfills will remain off limits for all activities, except for mowing and vegetation control measures to prevent root penetration of the caps, and will be excluded from any future development considerations. These landfills are identified on the installation map at Appendix 1.

## 6. INFRASTRUCTURE SUPPORT

Redevelopment proposals for Lexington Facility must recognize the importance of infrastructure support as a foundation for development. Since Kentucky American Water Company and Kentucky Utilities provide specific services to the installation, much of the infrastructure is already in place. The sewage system is currently still in operation; however, there is currently no gas utility available in the industrial area.

### 6.a. Major Utilities

The Kentucky American Water Company currently provides water to the installation. There is one water main which enters the facility from the west side of the installation and provides water to the water distribution plant. The water distribution plant is used to store and supply water to all facilities on the installation. Future plans are that the water distribution plant will be phased out and Kentucky American Water Company will provide metered service directly to each building on installation.

Kentucky Utilities provides electrical power to the installation. Service inside the perimeter is the responsibility of the installation owner. Future plans are to arrange for all buildings to be metered and each tenant will pay Kentucky Utilities directly for their own electrical service.

By agreement, the LFUCG has assumed operation of the sewage treatment facility and appropriate permits for continued operation have been acquired. Waste water treatment became a Commonwealth responsibility on August 3 1994. No change is expected in this service.

There is no provision of natural gas in the industrial area by a utility service; however, that capability may be added at a later date. It is expected that propane or fuel oil will be the predominant methods of heating tenant facilities. Tenants will be responsible for acquiring/providing heating capability for their work areas.

### 6.b. Integration to Urban Fabric

The installation is located 14 miles east northeast of the city of Lexington, Kentucky. As a result, it is not situated within the urban area of the community and therefore requires no integration into the urban fabric.

#### **6.c. Community Thoroughfare**

Located in a rural area, the installation has no impact on traffic or significant traffic patterns in the Lexington area. The greatest impact is represented by potential peak traffic in the morning and afternoon in the vicinity of Avon, Kentucky. However, the road network is sufficient to handle current and projected employment levels and goals without construction of major new roads or thoroughfares. Requirement for public access to the recreational area during the week is expected to be limited, and increased weekend traffic to the recreational area will be offset by a substantial decrease in industrial/commercial traffic in the vicinity of the installation.

#### **6.d. Installation Thoroughfare**

The installation is currently underutilized and requires no major road construction to facilitate on-post traffic. Given top employment projections, there is no anticipated need to increase either the size or numbers of thoroughfares on the installation or alter existing traffic patterns. The parking capacity of the installation is approximately 2,150 vehicles. Sufficient parking space exists to accommodate projected parking needs beyond FY 2000.

#### **6.e. Relevant Zoning Classifications**

The installation is currently zoned for government special use (SU-9). Under Commonwealth ownership, the property will be exempt from local zoning authority in accordance with state statute.

## 7. ENVIRONMENTAL ASSESSMENT

Consistent with the Community Environmental Response Facilitation Act (Public Law 102-426), the Army intends to make provisions for the disposal of portions of the installation as soon as they are determined to be environmentally safe and available for reuse. In support of this goal, baseline conditions and environmental consequences have been established for the study area in an Environmental Assessment (EA) for leasing of the facility (May 1994). A disposal EA will be prepared for the Army Materiel Command (AMC) by the U.S. Army Corps of Engineers, Louisville District. Recommendations for land use identified in this reuse plan constitute the basis for remediation as required compatible with projected activities on the installation. Thirteen natural and cultural resource categories were established in the EA to provide a framework for the identification of baseline conditions and effects of the proposed actions. For each of the resource categories, the EA evaluates two alternatives that represent the reuse options at the Lexington Facility. These reuse alternatives are referenced as Commonwealth of Kentucky (CK) and No Action/Caretaker status (NAC). These categories are generally defined as follows:

CK. Under this alternative, 780 acres are transferred to the Commonwealth of Kentucky; 570 acres will be utilized for light industrial, administrative, training, and residential, and 210 acres as public park/open space.

NAC. If the property is not transferred or sold, it will be placed in a caretaker status. The gates will be locked, and the Army will provide minimum security and maintenance for safety. Periodic buildings and grounds maintenance would be performed to minimize deterioration of the property.

The direct effects of the CK and NAC alternatives are summarized below.

### 7.a. Land Use

CK. Renovations and site improvements undertaken to attract tenants to the facility would not have adverse impacts to land use on the installation. Reuse of the facility is compatible with current area land use.

NAC. There will be no installation land uses and in time, buildings would deteriorate; adjacent land uses will not be affected if the installation is left in caretaker status.

#### **7.b. Socioeconomics**

CK. There will be positive impacts to the regional economy with reuse of the facility.

NAC. The regional economy would be negatively impacted if the current jobs were lost at the facility. Real estate prices, school systems and the housing market could be impacted due to relocations. Loss of state and local taxes would be significant.

#### **7.c. Physiography**

CK. No construction is anticipated at the site which will adversely affect geology, topography and soils. Appropriate control measures would be taken to mitigate erosion that may be initiated by operations and activities at the site.

NAC. Lack of activity at the site would have no impact on geology, soils and topography.

#### **7.d. Water Resources**

CK. Impacts to surface and groundwater will be minimal with implementation of good management practices for stormwater, spill prevention and waste management.

NAC. Under caretaker status, there should be little or no impact to surface water or ground water resources.

#### **7.e. Public Services and Utilities**

CK. Utility services will have to be refurbished and demand will increase as more tenants occupy the facility. The existing wastewater treatment plant will have to be upgraded if population surpasses 3,000 personnel. Solid waste generation by tenants will be minimized by an on-site recycling program to prevent significant impacts to the off-site landfill.

NAC. Caretaker status would create no demand on local utilities and public services.

#### **7.f. Public Health and Safety**

CK. Fire, safety, police and medical support is provided on an as needed basis by the local community. The facility currently has a small security force to protect immediate surrounding facilities. The security force has no arrest powers.

NAC. No impact because there is minimal requirement for fire, safety, and medical support. Fire fighting support would be contracted from the local community.

#### **7.g. Traffic and Transportation**

CK. Minimal impacts to local traffic flows could be expected under this alternative; however, these impacts would not exceed previous maximum employment level requirements.

NAC. Local traffic patterns would be unaffected by caretaker status.

#### **7.h. Air Quality**

CK. Minimal impacts to national air quality contaminant concentrations are expected to occur due to increased light industrial activities and vehicle emissions.

NAC. Regional air quality would be unaffected by caretaker status. Air emissions would decrease with cessation of polluting activities.

#### **7.i. Noise**

CK. Noise produced due to light industrial activity, small unit training and warehousing activities is expected to be minimal.

NAC. All noise producing activities will cease with the exception of periodic building and grounds maintenance.

#### **7.j. Hazardous Waste Site Remediation**

CK. Remediation activities are being undertaken by the Army to comply with base closure requirements and are not expected to affect leasing or transfer initiatives. Hazardous waste activities at tenant sites will be monitored to prevent further impacts.

NAC. No further hazardous materials usage is associated with this alternative. Remediation by the Army will be required to comply with state residential use standards at an additional federal cost of \$27 million.



#### **7.k. Vegetation, Wildlife and Wetland Resources**

CK. Minimal impacts will occur to vegetation and wildlife due to increased light industrial activities and training. Some vegetation may be lost due to construction of parking spaces, but this loss is expected to be minimal. Under this alternative, development or alteration of wetland areas on the facility is not expected to occur. No endangered or threatened species of plants or animals have been identified on the site.

NAC. No impacts.

#### **7.l. Visual Resources**

CK. This alternative is not expected to cause negative visual impacts because any building modifications are anticipated to be of similar type and appearance to surrounding buildings.

NAC. Visual resources will be negatively impacted if buildings are allowed to deteriorate and vegetation becomes overgrown.

#### **7.m. Cultural Resources**

CK. Cultural resource surveys are currently incomplete. Prior to any modification of existing facilities or archeological sites, the Commonwealth must consult with the State Historical Preservation Officer. Based on completed surveys, a Programmatic Agreement may be required for the facility. However, major renovation of building exteriors are not anticipated at the Lexington Facility. As a result, minimal cultural resource impacts are expected as a result of the transfer of the property to the Commonwealth.

NAC. Existing programmatic agreements for cultural resources require periodic Army maintenance to preclude deterioration of the historically important facilities.

#### **7.n. Floodplains**

CK. The Lexington Facility does not reside within a 100-year floodplain.

NAC. No impact.

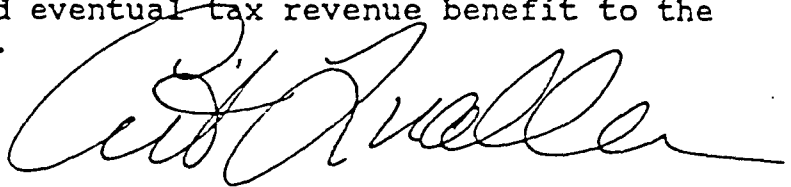
## 8. CONCLUSION

The Lexington Facility has served the north central Kentucky economic region with distinction for over 53 years. While the Federal government may have no further need for the facility, the property can still be used by the local community. With proper economic incentives, the installation represents an opportunity to revitalize the Avon, Kentucky area of Fayette County, Kentucky by providing a renewed source of employment. While revitalization will not occur overnight, current and near term tenants provide a cornerstone of economic activity upon which the Commonwealth can build. This opportunity must not be ignored, and these facilities should not be allowed to deteriorate. Development of a light industrial complex on the Lexington Facility is economically sound for the community and environmentally compatible with past installation activities. The Commonwealth of Kentucky is prepared and eager to accept this exciting challenge, even in light of needed substantial capital investments in order to facilitate the long-term economic recovery of the region and eventual tax revenue benefit to the state and local economies.

Crit Luallen Secretary,  
Finance and Administration Cabinet  
Commonwealth of Kentucky  
on behalf of Lexington-Blue Grass  
Army Depot Local Development  
Authority






## 8. CONCLUSION

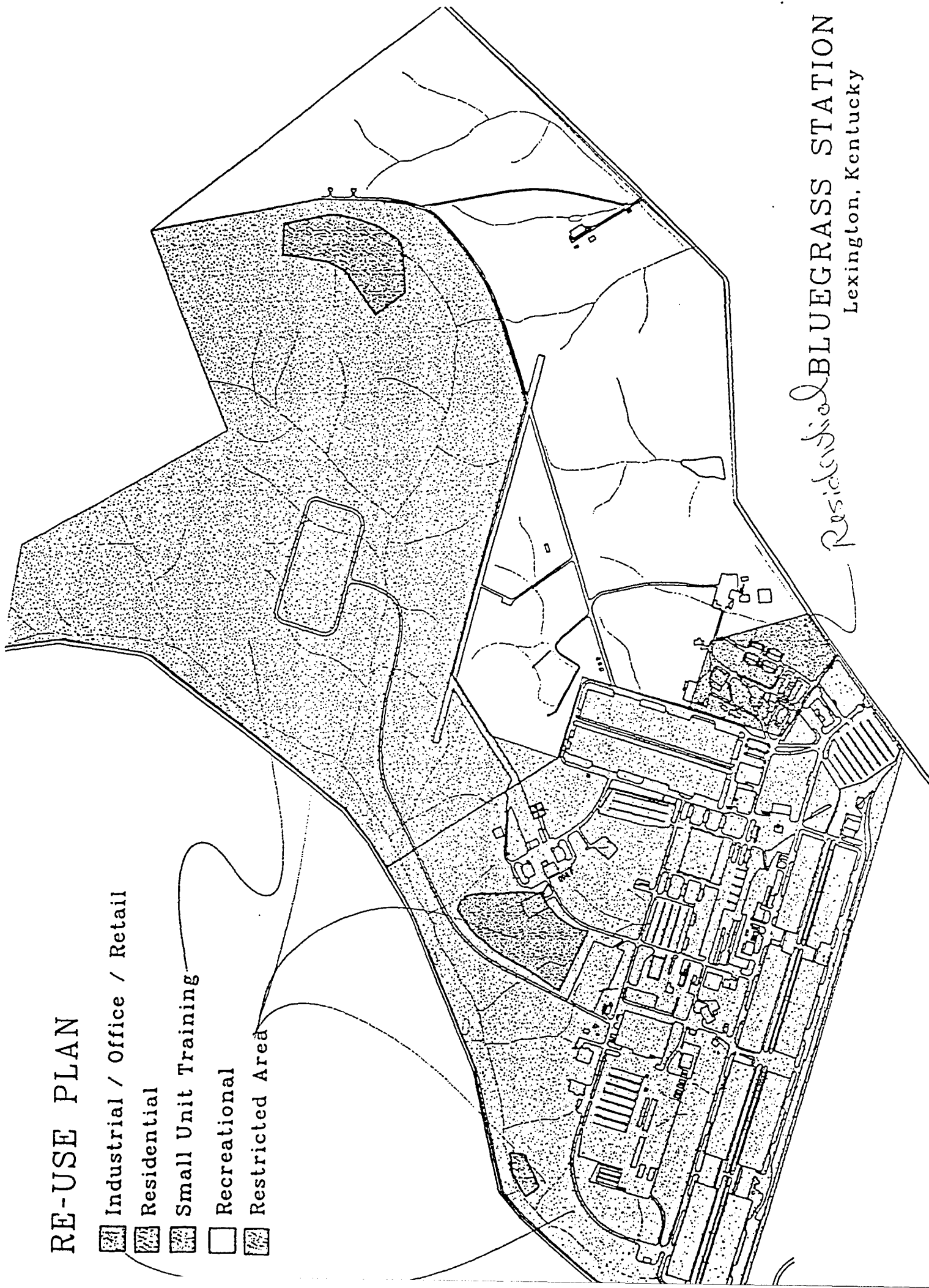
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# RE-USE PLAN

-  Industrial / Office / Retail
-  Residential
-  Small Unit Training
-  Recreational
-  Restricted Area



*Residential* BLUEGRASS STATION  
Lexington, Kentucky

**APPENDIX D**

**LEXINGTON-BLUEGRASS ARMY DEPOT**

**COMPREHENSIVE ASBESTOS SURVEY**

**SUMMARY**

U.S. ARMY  
ENVIRONMENTAL CENTER

LEXINGTON-BLUEGRASS ARMY DEPOT  
COMPREHENSIVE ASBESTOS SURVEY  
DRAFT REPORT

PART I

Lexington-Bluegrass Army Depot  
Lexington, Kentucky

Submitted to:  
Commander  
Department of the Army  
United States Army Environmental Center  
Aberdeen Proving Ground, Maryland

Submitted by:  
Metcalf & Eddy, Inc.  
2800 Corporate Exchange Drive  
Suite 250  
Columbus, Ohio 43231

Prepared by:  
Lawhon & Associates, Inc.  
Worthington, Ohio 43085

Prepared under:  
Contract No. DAAA15-90-016  
Task Order Number 4

March, 1993

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- B. Survey Plan
- C. Inspector and Management Planner Certificates
- D. DataChem NAVLAP Certification
- E. USAEC Assessment Forms

## **Part I: Summary of Asbestos-Containing Materials Lexington-Bluegrass Army Depot**

### **I. Introduction**

Lawhon & Associates, Inc. (L&A) conducted a detailed survey and hazard assessment for asbestos-containing materials (ACM) at the Lexington-Bluegrass Army Depot. The asbestos survey, initiated August 24, 1992, is part of a comprehensive environmental project which is being conducted by Metcalf & Eddy (M&E) for the Department of the Army, U.S. Army Environmental Center (USAEC). The U.S. Army Environmental Center (USAEC) was previously called the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA). L&A is a subconsultant to M&E. The Lexington-Bluegrass compound was previously a repair and maintenance facility for communication equipment and related activities. This survey is part of USAEC's base closure process for the Lexington-Bluegrass Facility.

The objective of the asbestos survey was to inspect, assess, and recommend response actions for friable and non-friable ACM in approximately 100 buildings. The Environmental Protection Agency's (EPA), Asbestos Hazard Emergency Response Act (AHERA), 40 CFR Part 763 Asbestos-Containing Materials in Schools was used as a guideline in conducting survey activities. L&A also used USAEC's guide for asbestos hazard assessment in U.S. Army facilities and sampling protocol. The survey and report activities were conducted by certified inspectors and management planners. A listing of acronyms and definitions used throughout this report is included in Appendix A. The following report is a summary of the findings.

This report summarizes L&A's activities in conjunction with the asbestos survey of the Lexington-Bluegrass Army Depot. Part 1 includes a site plan, survey methodologies, sampling protocols, summary of asbestos-containing materials, hazard assessment guidelines, recommendations for corrective actions, and reference documents.

Part 2 of this report is a building-by-building detailing of the comprehensive building survey, which includes summaries of confirmed ACM and non-ACM, laboratory reports, hazard assessments, and building diagrams showing the location of samples.

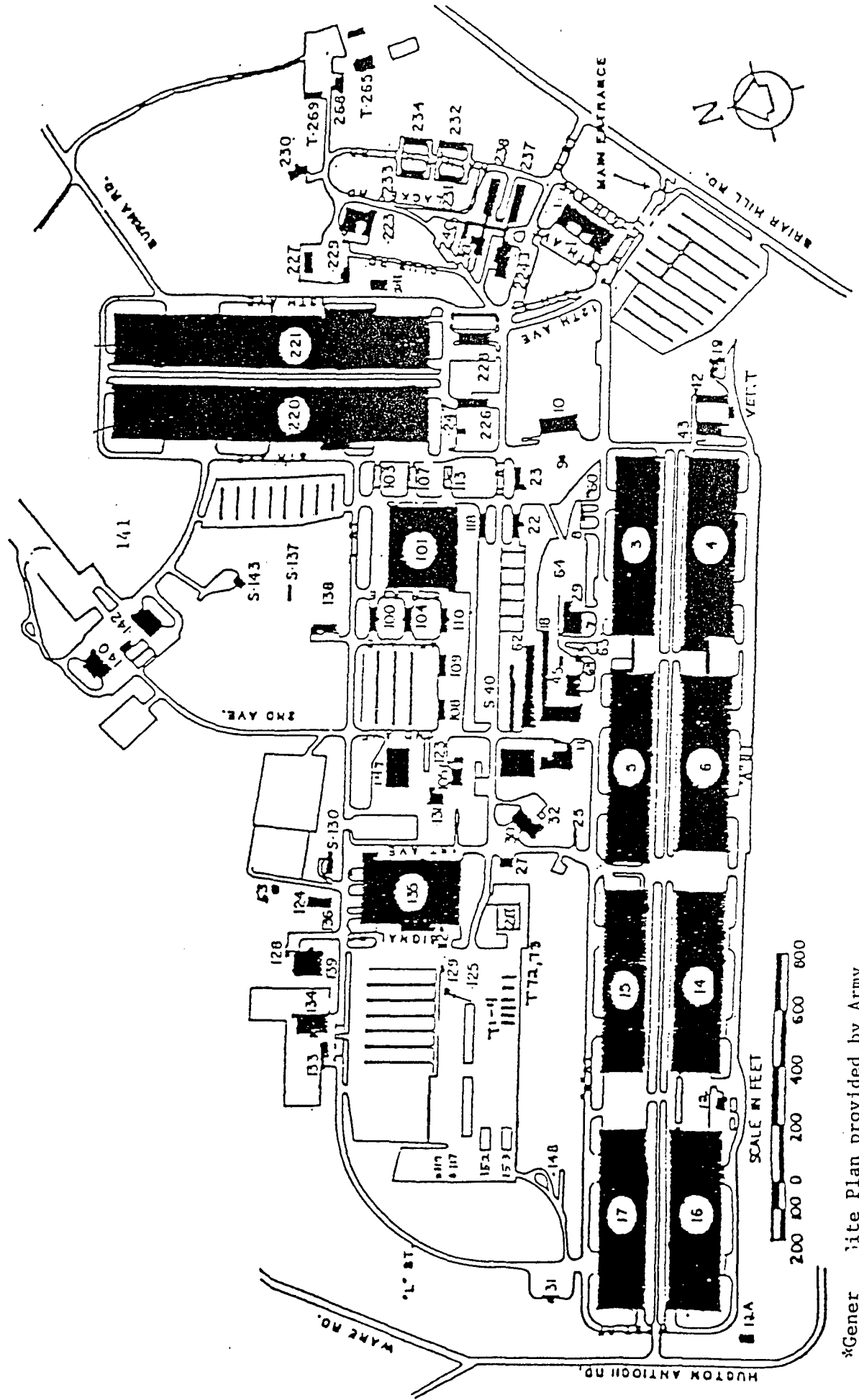
Part 3 of this report summarizes the estimated costs for asbestos abatement for each building which was found to contain ACM.

### **II. Site Plan**

The Lexington-Bluegrass Army Depot contains approximately 144 buildings and eight trailers, situated on 782± acres, and is located 10 miles east of Lexington, Kentucky. The locations of the buildings on the base are shown on the site diagram presented in Figure 1.



Lexington-Bluegrass Army Depot  
Figure 1. General Site Plan\*



\*General Site Plan provided by Army

### III. Survey Methodology

In preparation for the detailed survey, L&A conducted investigations of all buildings in the compound. The investigations consisted of a historical review of Base records, and an on-site visual examination prior to the comprehensive survey. The information gained from these activities was used by the inspectors to design and conduct the comprehensive building surveys and suspect ACM sampling.

#### Historical Records

Historical records which were reviewed consisted of the Base's previous asbestos surveys, logs from previous abatement projects, building drawings, and general building information. Previous asbestos surveys were used to gain insight on areas of confirmed asbestos. L&A reviewed the report of a 1987 asbestos survey, conducted by Carnow, Conibear & Associates, for 52 buildings. Asbestos abatement was performed in Building 1 by Romac in January, 1987, and North Brothers in January, 1988. Finishing schedules and building blueprints were reviewed for listed and hidden asbestos locations. Building size and use were evaluated for time management and budgeting considerations.

#### Pre-Survey Visual Investigation

A visual inspection of each building was conducted in order to develop a comprehensive Asbestos Survey Plan. This plan was developed from the preliminary data gathered during the visual inspection. A copy of the survey plan, dated July 29, 1992, is included in Appendix B.

All buildings on the site were visited. Buildings were placed in one of two categories: (1) buildings with no suspect ACM, and (2) buildings with suspect ACM. Buildings with no suspect ACM required no further additional investigation. These buildings are indicated in Table 2 with a 0 number of suspect homogenous areas.

The buildings with suspect ACM were targeted for a comprehensive survey and hazard assessment of ACM. Please note that roofing materials and mastic on all buildings could not be sampled during the detailed inspection. However, roofing and mastic materials should be sampled and tested for asbestos before any demolition or renovation occurs. The survey plan addressed specific suspect materials, estimated quantities, and a projected number of samples required.

#### Comprehensive Survey

The comprehensive survey, initiated August 24, 1992, and completed in October 1992, was designed to give USAEC an accurate assessment of friable and non-friable ACM inside the base buildings as well as outside steam lines. The comprehensive survey consisted of the following tasks:

- Detailed Survey
- Sampling
- Analysis
- Hazard Assessment

## Detailed Survey

All building surveys were performed by EPA accredited personnel. All surveys were conducted per the AHERA regulations, 40 CFR Part 763 Subpart E. A copy of the sampling guidelines were presented in the Survey Plan (Appendix B). Certificates of training for asbestos inspectors and management planners are included in Appendix C. A visual survey was conducted building by building. In addition, outside steam piping was surveyed for asbestos. Homogeneous areas of suspect friable and non-friable ACM were recorded and quantified. Friable suspect materials included thermal system insulation, sprayed-on and trowelled-on plaster, wall board, and ceiling tile. Suspect non-friable materials consisted of floor tile, linoleum, and transite board. Suspected ACM materials were touched to determine friability.

## Sampling Protocol

L&A collected samples for all homogeneous areas of suspected ACM. A total of 1,621 samples were collected using the criterion outlined in Table 1. This includes the quality control samples, one sample per building, which are not included in the individual building summaries presented in Part 2 of this report.

Suspect homogeneous areas were quantified and general conditions noted. Distances were measured using a wheel-type measuring device, tape measure, or ruler. Square footage was calculated from measured dimensions. Fittings were counted.

These suspect materials were then photographed and samples collected. Samples were collected in sealable containers and labeled with the sample number. A chain-of-custody documenting sampling data and location were filled out for each homogenous area. One quality control sample per building was collected and submitted for analysis. No destructive sampling for hidden materials was performed on roofing or wall materials.

**Table 1. Sample Collection Criterion**

	Amount of Material (sq. ft.)	Minimum Number of Samples
Surface Materials:	1000 $\geq$	3
	1001 – 5000	5
	> 5000	7
Thermal System Insulation	Minimum of 3 samples of each homogeneous material	
Miscellaneous Materials	Minimum of 3 samples of each homogeneous material	
Repair/Patch Area	Two samples per incident	
Quality Control	One sample per building	

## Analysis

Chain-of-custody documentation and all samples collected were submitted to DataChem Laboratories. DataChem was instructed to analyze the samples from each homogeneous material until two positive results were obtained. For example, if three samples of one homogeneous material were collected, DataChem would analyze the samples in numerical order until two samples were confirmed to contain asbestos, and then stop. All bulk sample

analyses were conducted using Polarized Light Microscopy (PLM) for asbestos. Lawhon & Associates, Inc. transported all samples to DataChem.

A copy of DataChem's National Voluntary Laboratory Accreditation Program (NVLAP) certification is included in Appendix D.

#### IV. Survey Results

The Lexington-Bluegrass Army Depot was surveyed for friable and non-friable asbestos materials. Table 2 summarizes the results of that survey, by building. Approximately 152 buildings were visually surveyed for ACM. Those buildings with suspect friable and non-friable ACM would receive a comprehensive survey. Approximately 2,116,500 sq. ft. of interior building space and outside steam line were surveyed. Five hundred and thirty-eight homogeneous areas were sampled for ACM, and analyzed by Polarized Light Microscopy (PLM). A total of 1,533 samples of suspect materials were collected, as well as 88 samples for Quality Control. A total of 313 homogeneous areas were confirmed to be asbestos-containing. Under AHERA guidelines, a material is to be considered asbestos-containing if the asbestos content is greater than 1%. The survey results indicate 63 buildings contain asbestos. Of these, 27 buildings contained both friable and non-friable, 11 buildings contained only friable, and 25 buildings contained only non-friable asbestos.

Table 2. Summary of Survey Findings by Building

Bldg. #	Approx. Bldg. Size (sq. ft.)	No. of Suspect Homogeneous Areas	No. of Samples Collected	No. of Asbestos Homogeneous Areas	Confirmed ACM	
					Friable	Non-Friable
1	45,000	20	60	10	No	Yes
2	200	2	6	0	No	No
3	132,800	24	70	16	Yes	Yes
4	116,200	32	96	14	Yes	Yes
5	141,700	16	48	11	Yes	Yes
6	131,800	19	57	14	Yes	Yes
7	9,400	5	15	1	No	Yes
8	800	0	0	0	No	No
9	400	2	6	2	Yes	No
10	8,600	9	27	9	Yes	Yes
11	2,300	7	21	6	Yes	Yes
12	800	2	6	2	Yes	No
12A	900	3	7	1	No	Yes
13	0	0	0	0	No	No
14	132,500	5	12	4	Yes	No
15	132,500	2	4	2	Yes	No
16	132,500	8	22	2	Yes	No
17	132,500	3	7	2	Yes	No
17E	1,500	3	7	1	No	Yes
18A/B	18,900	26	78	15	Yes	Yes

Table 2 (continued). Summary of Survey Findings by Building

Bldg. #	Approx. Bldg. Size (sq. ft.)	No. of Suspect Homogeneous Areas	No. of Samples Collected	No. of Asbestos Homogeneous Areas	Confirmed ACM	
					Friable	Non-Friable
19	2,400	10	26	9	Yes	Yes
21	0	0	0	0	No	No
22	3,200	1	3	0	No	No
23	3,500	0	0	0	No	No
24	0	0	0	0	No	No
25	1,800	8	22	7	No	Yes
26	500	1	3	0	No	No
27	1,200	3	9	3	Yes	No
28	8,000	3	9	3	Yes	Yes
30	7,000	12	36	7	Yes	Yes
31	100	0	0	0	No	No
32	900	0	0	0	No	No
33	200	0	0	0	No	No
34	100	0	0	0	No	No
38	100	0	0	0	No	No
39	100	0	0	0	No	No
40	7,300	0	0	0	No	No
41	10,700	0	0	0	No	No
42	4,000	0	0	0	No	No
43	6,500	2	6	0	No	No
45	800	3	8	3	Yes	Yes
46	100	2	6	0	No	No
47	200	0	0	0	No	No
53	100	1	3	0	No	No
54	100	0	0	0	No	No
57	0	0	0	0	No	No
60	0	0	0	0	No	No
62	0	0	0	0	No	No
63	400	0	0	0	No	No
64	1,300	2	6	2	Yes	No
100	3,000	0	0	0	No	No
101	79,000	2	4	1	No	Yes
103	3,000	0	0	0	No	No
104	3,000	0	0	0	No	No
105	2,400	0	0	0	No	No
106	3,000	0	0	0	No	No
107	3,000	0	0	0	No	No
108	3,000	0	0	0	No	No

Table 2 (continued). Summary of Survey Findings by Building

Bldg. #	Approx. Bldg. Size (sq. ft.)	No. of Suspect Homogeneous Areas	No. of Samples Collected	No. of Asbestos Homogeneous Areas	Confirmed ACM	
					Friable	Non-Friable
109	3,000	0	0	0	No	No
110	3,000	0	0	0	No	No
112	200	0	0	0	No	No
113	3,000	0	0	0	No	No
117	400	2	6	0	No	No
118	3,000	0	0	0	No	No
119	100	0	0	0	No	No
123	100	0	0	0	No	No
124	400	0	0	0	No	No
125	500	0	0	0	No	No
126	400	0	0	0	No	No
128	400	0	0	0	No	No
129	100	0	0	0	No	No
130	2,800	2	6	0	No	No
131	3,600	7	15	6	Yes	Yes
132	0	0	0	0	No	No
133	1,800	4	8	2	Yes	Yes
134	10,300	8	24	6	Yes	Yes
135	117,700	42	126	31	Yes	Yes
136	0	0	0	0	No	No
138	2,900	12	25	7	No	Yes
139	11,300	15	44	10	Yes	Yes
140	7,200	5	15	2	Yes	Yes
141	7,200	6	14	2	Yes	Yes
142	1,800	0	0	0	No	No
145	200	2	6	1	No	Yes
146	0	0	0	0	No	No
147	12,800	3	9	3	Yes	Yes
149	4,800	0	0	0	No	No
150	4,800	0	0	0	No	No
151	4,800	0	0	0	No	No
152	4,000	0	0	0	No	No
153	4,000	1	7	0	No	No
154	9,600	0	0	0	No	No
156	9,600	0	0	0	No	No
159	300	1	3	0	No	No
160	300	1	3	0	No	No

Table 2 (continued). Summary of Survey Findings by Building

Bldg. #	Approx. Bldg. Size (sq. ft.)	No. of Suspect Homogeneous Areas	No. of Samples Collected	No. of Asbestos Homogeneous Areas	Confirmed ACM	
					Friable	Non-Friable
190	8,300	0	0	0	No	No
220	249,700	18	53	9	Yes	Yes
221	247,600	28	82	18	Yes	Yes
223	10,100	21	62	13	Yes	Yes
224	6,600	7	20	3	Yes	Yes
224A	600	1	9	1	No	Yes
224B	1,800	2	6	1	No	Yes
225	200	0	0	0	No	No
226	5,000	13	38	9	Yes	Yes
227	1,600	0	0	0	No	No
228	4,100	0	0	0	No	No
229	1,900	1	3	0	No	No
230	2,300	2	6	1	No	Yes
231A	1,200	2	6	1	No	Yes
231B	1,200	3	7	2	No	Yes
232A	1,200	3	7	1	No	Yes
232B	1,200	3	7	2	No	Yes
233A	1,200	3	8	1	No	Yes
233B	1,200	3	9	1	No	Yes
234A	1,200	3	7	2	No	Yes
234B	1,200	2	6	1	No	Yes
236	800	0	0	0	No	No
237	500	7	20	5	Yes	No
237A	500	2	6	1	No	Yes
237B	500	2	6	0	No	No
237C	500	2	4	2	Yes	No
237D	500	6	11	3	Yes	Yes
238	4,200	8	18	8	Yes	Yes
238A	1,000	2	6	1	Yes	No
238B	1,000	5	15	2	No	Yes
238C	600	1	3	0	No	No
239	1,900	5	13	2	No	Yes

Table 2 (continued). Summary of Survey Findings by Building

Bldg. #	Approx. Bldg. Size (sq. ft.)	No. of Suspect Homogeneous Areas	No. of Samples Collected	No. of Asbestos Homogeneous Areas	Confirmed ACM	
					Friable	Non-Friable
240	1,600	7	21	2	No	Yes
241	600	1	3	0	No	No
242	500	1	3	0	No	No
243	500	1	3	0	No	No
244	500	1	3	0	No	No
247	600	1	3	1	No	Yes
264	200	0	0	0	No	No
265	3,100	0	0	0	No	No
266	0	0	0	0	No	No
267	0	0	0	0	No	No
268	1,800	1	3	0	No	No
269	1,200	0	0	0	No	No
300	400	0	0	0	No	No
301	1,400	0	0	0	No	No
303	1,600	0	0	0	No	No
T1	300	2	6	0	No	No
T2	300	2	6	0	No	No
T3	300	1	3	0	No	No
T4	300	1	3	0	No	No
T72	300	1	3	0	No	No
T73	300	1	3	0	No	No
VT	300	2	6	0	No	No
T7E1464	300	3	9	2	No	Yes
OSL	0	8	16	1	Yes	No
5800	1000	0	0	0	No	No
Q/C			88			
Totals	2,116,500	538	1621	313	N/A	N/A

T = Trailer

VT = Vet Trailer

OSL = Outside Steam Lines



## V. Hazard Assessment

A hazard assessment was performed for each homogeneous area, to determine if corrective action was necessary. The field inspectors used USAEC's Guide for Asbestos Hazard Assessment in U.S. Army Facilities. This guide aided inspectors in conducting damage, friability, exposure assessments, as well as prioritizing corrective actions. Copies of the USAEC's forms used for the assessment are included in Appendix E.

ACM conditions such as physical damage, water damage, proximity to maintenance, type of ACM, and percentage of asbestos were evaluated for each homogeneous area. These conditions are addressed in Checklist 1a, presented in Appendix E. Numerical values were assigned based on materials characteristics, as shown on the checklist 1a. The values were then added to determine damage assessment, twenty-eight being the maximum and 0 being the minimum.

Friability was assessed using the guidelines in Checklist 1b, also presented in Appendix E. Numerical values were assigned to each homogeneous area based on material friability, occupant accessibility, use of space, air movement, visible damage, percentage of exposure and visibility, number of employees in the area, and content of asbestos.

The damage and exposure values for each homogeneous area were entered into a matrix to determine a Hazard Assessment Index. A copy of the Hazard Assessment Matrix is presented in Table 3.

The Hazard Assessment Index is a guide to aide in establishing priorities for damaged or friable ACM. This index is from the U.S. Army Environmental Center (USAEC) Guide for Asbestos Hazard Assessment in US Army Facilities. Table 4 shows the USAEC recommended corrective actions for Assessment Indexes A through F.

**Table 3. Matrix Assessment Index**

	Total Score of Exposure (4 < E < 28) From Checklist 1b				
		28-24	23-15	14-8	7-4
Total Score of Damage	17-13	A	A	B	C
(1 < D < 17)	12-9	A	B	C	D
From Checklist 1a	8-5	B	C	D	E
	4-1	C	D	E	F

Table 4. Recommended Corrective Actions

Assessment Index	Recommended Management Corrective Actions
A	<u>Immediate Action</u> - Follow-up actions may include isolation of the area, the restriction of access and/or immediate removal of the ACM. If removal is indicated, action planning should include a detailed survey. This condition will require a near term expenditure of funds. Managers must know exactly what needs to be done to eliminate the asbestos hazard and how to use available funds most effectively.
B	<u>Action as Soon as Possible</u> - Initiate a Special O&M program immediately. Possible follow-up actions may include limiting access to the area and scheduling of removal during periods of low activity in the facility, not waiting for the normal repair and maintenance cycle.
C	<u>Planned Action</u> - Initiate a Special O&M program. Removal should be scheduled as part of normal repair and maintenance cycle of a facility, minimizing cost and disturbance.
D	<u>Repair</u> - Initiate a Special O&M program. Damaged areas should be repaired, where "repair" means returning damaged ACM to an undamaged condition to contain fiber release.
E	<u>Monitoring</u> - Continue Special O&M program. Take steps to prevent damage to the ACM. Monitor the condition of all ACM frequently.
F	<u>No Immediate Action</u> - Continue Special O&M program until major renovation or demolition requires removal or until assessment factors change.

All assessments were conducted by accredited personnel. All assessment personnel have completed a Management Planner training course, and have more than 5 years experience inspecting for ACM and designing of abatement and repair projects. An O&M program, when necessary, is established to minimize exposure of all building occupants to airborne asbestos. O&M programs include work practices to maintain ACM previously damaged, prevention of further ACM damage, and monitoring the condition of ACM.

## VI. Friable Asbestos

Quantities of friable asbestos-containing materials are shown in Table 5, tabulated by Hazard Assessment Index. At this base, a total of 20 buildings contain friable asbestos that is rated as an A, B, or C hazard.

There are approximately 922 ln. ft. of pipe insulation with material that is rated as an A and 42 sq. ft. of A-rated hot water tank insulation. Category B rated pipe insulation totals 39 ln. ft. and 11 pipe fittings. In addition, there is a 25 lb. bag of B-rated material and 3,300 sq. ft. of B-rated floor tile.

The C-rated pipe insulation totals 9,894 ln. ft. along with 705 pipe fittings. Approximately 5,200 sq. ft. of floor tile mastic was rated as a C hazard. Five sq. ft. of wallboard and 45 sq. ft. of tank insulation received a C hazard rating.

Table 5. Summary of Friable ACM by Hazard Assessment

Buildings Containing Asbestos	Quantity of Friable Asbestos									
	CATEGORY A			CATEGORY B			CATEGORY C			MISC.
	PI	PF	SI	PI	PF	SI	PI	PF	SI	
3							3,620			
4									5,200 Mastic	
6							3,424	327		
10							75			
11							15			
15							18			
17								1		
18 A/B							320			
19								10		
27				38	11					
28							810			
30	922									
131						25 lb. bag			5	
134									45 TI	
135						3,300 FT		230		
147								46		
220							1,435	46		
237C			42 HWT	1						
237D							177	38		
238								7		

PI = Pipe insulation, linear feet  
 PF = Pipe fittings, each fitting  
 SI = Surface insulation, square feet  
 FT = Floor tile, square feet  
 TI = Tank Insulation  
 HWT = Hot Water Tank  
 Mastic = Tile glue, square feet

## VII. References

1. Code of Federal Regulations, Toxic Substance Control Act, US Environmental Protection Agency, 40 CFR part 763, Asbestos Hazard Emergency Response Act (AHERA).
2. Carnow, Conibear & Associates, Ltd., Asbestos Survey for the US Army, Lexington facility.

## **APPENDIX E**

### **FINAL RADIOLOGICAL SURVEY RESULTS**



DEPARTMENT OF THE ARMY  
U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE (PROVISIONAL)  
ABERDEEN PROVING GROUND, MARYLAND 21010-5422



REPLY TO  
ATTENTION OF

MCH3-DS-HP (40)

1 MAY 1995

MEMORANDUM FOR Commander, U.S. Army Materiel Command, ATTN:  
AMCSP-P (Mr. Manfre), 5001 Eisenhower Avenue,  
Alexandria, VA 22333-0001

SUBJECT: Release of Buildings for Unrestricted Use

1. The U.S. Army Center for Health Promotion and Preventive Medicine (Provisional) (USACHPPM) (PROV) recommends the following buildings at the Lexington Facility, Blue Grass Army Depot be released for unrestricted use to the general public. A final report will be provided with all radiological survey data, diagrams, sampling locations and instrumentation used:

Building 3	Building 15	Building 152	Building 220
Building 5	Building 149	Building 153	Building 221
Building 6	Building 150	Building 154	
Building 14	Building 151		

2. A review of all survey data indicates that there is no radiological contamination detected above the natural background radiation levels. We, therefore, conclude that the above listed buildings may be released for unrestricted use. All radiological surveys were performed to meet the Nuclear Regulatory commission requirements outlined in NUREG/5849.

3. The point of contact is the undersigned and may be contacted at DSN 584-3502.

FOR THE COMMANDER:

*Harris Edge*  
HARRIS EDGE  
Manager, Industrial Health  
Physics Program

CF:  
CDR, AMC, ATTN: AMCSG (LTC KELSEY)  
CDR, DESCOM ATTN: SAFETY OFFICE (MR. GRANGER)  
CDR, BGAD, ATTN: SDSBG-RM (MR. BABER)

OPTIONAL FORM 98 (7-90)

FAX TRANSMITTAL

# OF PAGES 1061

TO <i>Mr. Baber</i>	FROM <i>Harris Edge</i>
DATE/TIME <i>BGAD, LEX</i>	PHONE <i>584-3502</i>
FAX <i>745-6465</i>	FAX <i>584-8261</i>

NSN 7540-01-317-720 5098-101 GENERAL SERVICES ADMINISTRATION

TOTAL P.01  
TOTAL P.01

**APPENDIX F**  
**REFERENCES**

## REFERENCES

Commonwealth of Kentucky. March 1995. Lexington Facility Blue Grass Army Depot Lexington, Kentucky Reuse Plan.

USAEC. April 1994. Base Realignment and Closure (BRAC) Cleanup Plan, Version I, Lexington-Bluegrass Army Depot, Lexington, Kentucky, The Earth Technology Corporation.

USAEC. November 1993. Community Environmental Response Facilitation Act (CERFA) Report, Final Report: Lexington-Bluegrass Army Depot, Lexington, Kentucky.

USAEC. March 1993. Lexington-Bluegrass Army Depot Comprehensive Asbestos Survey; Lexington-Bluegrass Army Depot, Lexington, Kentucky.

USAEC. April 1994. Lexington-Bluegrass Army Depot RCRA Facility Investigation Draft Final Report, Volumes I & II: Lexington-Bluegrass Army Depot, Lexington, Kentucky.

USAEC. June 1994. Lexington-Bluegrass Army Depot Corrective Measures Study Draft Report: Lexington-Bluegrass Army Depot, Lexington, Kentucky.

USATHAMA. March 1990. Enhanced Preliminary Assessment Report: Lexington-Bluegrass Army Depot, Lexington Facility, Lexington, Kentucky. U.S. Army Toxic and Hazardous Materials Agency, CETHA-BC-CR-900441.

USATHAMA. July 1990. Master Environmental Plan: Lexington-Bluegrass Army Depot, Lexington Facility, Lexington, Kentucky. U.S. Army Toxic and Hazardous Materials Agency, CETHA-BC-CR-90073.

USATHAMA. April 1992. Report of Radiological Survey of Buildings 103,128,139, an 14 and Underground Storage Tank Survey Report for the RCRA Facility Investigation/Corrective Measures Study (RFI/CMS) and Base Closure Environmental Study at the Lexington-Bluegrass Army Depot.

SVERDRUP, March 7, 1995. Draft Report Design Investigation Activities of Building Three, Lexington-Bluegrass Army Depot.

SVERDRUP, May 3, 1995. Draft Remedial Design Investigation Report for Buildings 6, and 220/221, Lexington-Bluegrass Army Depot.

SVERDRUP, June 1995. Draft Supplemental Site Investigation Report DRMO Storage Area and Off-Post Outfall Pools, Lexington-Bluegrass Army Depot, Lexington, Kentucky.